



PAGE 1 OF 4  
DATE: 03-27-1997  
REVISION: A  
W.O. NO: 63183  
CUSTOMER: IRCON GMBH  
LOCATION: GERMANY

## INFRARAIL SPECIAL NUMBER R711

### PURPOSE AND DESCRIPTION:

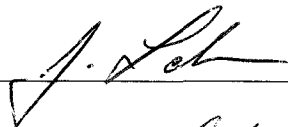
CUSTOMER REQUIRES A INFRARAIL TEMPERATURE SYSTEM WITH A SPECIAL TEMPERATURE RANGE AND OPTICAL RESOLUTION AS FOLLOWS :

MODEL: DNE31-99C  
RANGE: 500 - 1300 DEG. C  
OPTICAL RESOLUTION: D/100  
WAVELENGTH: 1.49 - 1.6 um

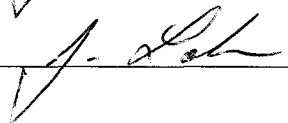
### GENERALITY OF APPLICATION AND RESTRICTIONS:

RESTRICTIONS: ACCURACY SPECIFICATION IS DERATED TO 1.0% OF FULL SCALE TEMPERATURE FOR THIS TEMPERATURE SPAN.  
EMISSIVITY IS RESTRICTED TO A MINIMUM SETTING OF 0.3 FOR THE FIRST 50°C OF THE TEMPERATURE RANGE.  
UNRESTRICTED: SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: \_\_\_\_\_



APPROVED BY: \_\_\_\_\_



DATE: \_\_\_\_\_

3-27-97

**INFRARAIL SPECIAL NUMBER R711**

REVISION: A  
DATE: 03-27-1997

**PRODUCTION INSTRUCTIONS:**

START WITH A MODEL DNE31-30C ELECTRONICS MODULE, AND INSTALL M1 MODULE AS PER BILL OF MATERIAL ON PAGE 3.

FOR THE SENSING HEAD, START WITH A MODEL DNE31-30C SENSOR AND MAKE THE FOLLOWING CHANGES:

DETECTOR ASSEMBLY (C11209) CHANGES:

1. FOR THE DETECTOR , USE DETECTOR 590792 (InGaAs) IN PLACE OF SILICON DETECTOR.
2. WIRE THE DETECTOR PER **DETAIL A** OF DRAWING C-11207.
3. FOR THE FILTER USE P.N. 64055-2 (1.49 - 1.6 um).

**CALIBRATION INSTRUCTIONS:**

**NOTE: ACCURACY SPECIFICATION IS 1.0% FOR THIS RANGE. LINEARIZER SPEC IS 0.5%.**

CALIBRATE AS PER STANDARD.

**MANUAL INSTRUCTIONS:**

GENERIC INFRARAIL SERIES MANUAL.

INFRARAIL SPECIAL NUMBER R711  
TEMPERATURE RANGE: 500 TO 1300 DEGREES C  
SPECTRUM: 1.49 TO 1.60 MICRONS

TEMPERATURE DEGREES C	SENSOR OUTPUT IN uAMPS	INDICATOR OUTPUT mAMPS
500.0	0.0235	4.000
525.0	0.0343	4.500
550.0	0.0488	5.000
575.0	0.0681	5.500
600.0	0.0931	6.000
625.0	0.1253	6.500
650.0	0.1658	7.000
675.0	0.2162	7.500
700.0	0.2782	8.000
725.0	0.3534	8.500
750.0	0.4438	9.000
775.0	0.5512	9.500
800.0	0.6778	10.000
825.0	0.8257	10.500
850.0	0.9971	11.000
875.0	1.1943	11.500
900.0	1.4195	12.000
925.0	1.6751	12.500
950.0	1.9634	13.000
975.0	2.2868	13.500
1000.0	2.6477	14.000
1025.0	3.0483	14.500
1050.0	3.4909	15.000
1075.0	3.9779	15.500
1100.0	4.5114	16.000
1125.0	5.0936	16.500
1150.0	5.7265	17.000
1175.0	6.4124	17.500
1200.0	7.1530	18.000
1225.0	7.9503	18.500
1250.0	8.8061	19.000
1275.0	9.7221	19.500
1300.0	10.7000	20.000

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 017788

SUNTOWN & COMPANY  
P. O. BOX 26-666  
ATTN: JOHN STONE  
TAIPEI,  
TAIWAN R.O.C.

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

SUNTOWN & COMPANY  
C/O PRIORITY FREIGHT CORP  
1135 GRANDVIEW DR-B. LIU  
S SAN FRANCISCO, CA 94080

REQUEST DATE (MM-DD-YY) 08-20-99 PROMISE DATE (MM-DD-YY) 08-20-99

OUR ORDER NO. 71157 ORDER DATE (MM-DD-YY) 07-16-99

YOUR ORDER NO. POR-880716B

TERMS 0.00/0/60

F.O.B. ORIGIN

CODE 1059 (100.00)

VIA UPS

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#1844 <i>w.o. 2466</i>	<del>DN_DNE31-13C</del> <i>99C</i> IRCON INFRARAIL IRT SYSTEM-COMPLETE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	2	0.00	1480.00	2960.00
<i>Redo Special R 7/11</i>						
<i>Temp range 500-1300C</i>						
<i>RAB 7/19</i>						
<b>GRAND TOTAL</b>						<b>USD2,960.00</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY) 05-14-99 PROMISE DATE (MM-DD-YY) 05-14-99

OUR ORDER NO. 70434 ORDER DATE (MM-DD-YY) 04-30-99

YOUR ORDER NO. D-6698

TERMS 0.00/0/60

F.O.B. ORIGIN

CODE 1057 (100.00)

VIA MSAS

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. 008241

IRCON GMBH  
POSTFACH 1361, D-65221  
GRILLPARZERS  
TAUNUSSTEIN,  
GERMANY

SHIPPING ADDRESS TAX CODE

INTROPA  
SPEDITIONSGESELLSCHAFT GM  
FRANKFURT AIRPORT  
ZUR VERGUEGUNG IRCONGMBH  
FRANKFURT,  
GERMANY

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#1076 <i>w.o. 1488</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE  <i>99C - Relo Special No R711</i> <i>Temp range 500-1300C</i> <i>PRB</i> <i>4/30</i> Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C	1	0.00	1424.00	1424.00
2	MOD-CHARGES	DN_DNE31-13C MODIFICATION OF PRODUCT	1	0.00	89.00	89.00
3	AA-3	AIR PURGE ACCESSORY	1	0.00	151.30	151.30
4	AP-1	FLANGED ACCESSORY ADAPTER PLATE	1	0.00	124.60	124.60
					<b>GRAND TOTAL</b>	

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 017788

SUNTOWN & COMPANY  
P. O. BOX 26-666  
ATTN: JOHN STONE  
TAIPEI,  
TAIWAN R.O.C.

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

SUNTOWN & COMPANY  
C/O PRIORITY FREIGHT CORP  
463 LITTLEFIELD AVE  
ATTN:BERNARD LIU  
S SAN FRANCISCO, CA 94080

REQUEST DATE (MM-DD-YY) 04-30-99 PROMISE DATE (MM-DD-YY) 04-30-99

OUR ORDER NO. 70166 ORDER DATE (MM-DD-YY) 04-01-99

YOUR ORDER NO. POI-880401

TERMS 0.00/0/60

F.O.B. ORIGIN

CODE 1059 (100.00)

VIA UPS

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT	
1	DN#805 <i>w.o. 1206</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - SELECT METER 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	2	0.00	1280.00	2560.00	
						<b>GRAND TOTAL</b>	<b>USD2,560.00</b>

*99c - Red Special No R711  
Range 500-1300c  
AMB 4/5*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60174 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426  
  
IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_  
  
GEBRUEDER KNAUFF  
EINERSHEIMSTRASSE 53  
D-97346  
IPHOFEN  
DEUTSCHLAND,  
GERMANY

REQUEST DATE (MM-DD-YY) 08-11-00 PROMISE DATE (MM-DD-YY) 08-11-00  
OUR ORDER NO. 74844 ORDER DATE (MM-DD-YY) 08-03-00  
YOUR ORDER NO. 200040309  
TERMS 0.00/0/180  
F.O.B. ORIGIN  
CODE 1001 (100.00)  
VIA UPS INTL  
SPECIAL SHIPPING INSTRUCTIONS REF: P.O. 1035/14392/0/35

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-EM#6379 <i>w.o. 7276</i>	DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY  <i>Redo Spec. No R711- Temp range 500-1300C</i>  Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	1	0.00	475.20	475.20
2	DN-C#6380	CBDNEPVC I INFRARAIL CABLE ONLY  Consists of the following: 1.0000 - DN CB/CABLE ASSY'S 1.0000 - E SERIES CABLE/ASSY 1.0000 - PVC INTERC. CB ASSY 13.2000 - Meters conv. to feet  <i>AB 8/13</i>	2	0.00	0.00	0.00
<b>GRAND TOTAL</b>						

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

BOM Number : DN#805 - IRCON INFRARAIL IRT

SO-LI: 70166\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	Start Use	End Use
1	DN0DNE	DN PRICES	1.0000	EA		M P				
1	C11201	SENSING HEAD FINAL ASSEMB	1.0000	EA		M P				
2	451322	FIELD STOP .022DIA	1.0000	EA		B	3709	05-17-96		
2	C11201/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B	3709	05-17-96		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-96		
2	C11209	SH DETECTOR ASSEMBLY (E-S	1.0000	EA		M P	3709	05-17-96		
3	T-C11209-1	SELECT DET. ASSY. (E-SERI	1.0000	EA		B	3770	08-21-96		
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-96		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-96		
2	990100004	EPOXY HB FULLER FE 7004	1.0000	EA		B	3709	05-17-96		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-96		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-96		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-96		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-96		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-96		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-96		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-96		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-96		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-96		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-96		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-96		
2	C11201/02	SEE EXTENDED DESCRIPTION	3.0000	EA		B				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-96		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-96		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-96		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	1.0000	EA		B	3709	05-17-96		
2	C11201/03	SEE EXTENDED DESCRIPTION	5.0000	EA		B				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-96		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-96		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-96		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B	3913	04-02-97		
2	D11198/01	SEE EXTENDED DESCRIPTION	3.0000	EA		B				
2	D11198/02	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B	3913	04-02-97		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B	3913	04-02-97		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B	3913	04-02-97		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B	3913	04-02-97		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B	3913	04-02-97		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B	3913	04-02-97		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M P	3913	04-02-97		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B	3913	04-02-97		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B				
1	U-M1-R711	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P				
2	103013011	RES. 301K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101303011	RES. 130K OHM MF 1/4W 1%	1.0000	EA		B				
2	101502011	RES. 15.0K OHM MF 1/4W 1%	1.0000	EA		B				

BOM Number : DN#805 - IRCON INFRARAIL IRT

SO-LI: 70166\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use
2	105762011	RES. 57.6K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	109312011	RES. 93.1K OHM MF 1/4W 1%	1.0000	EA		B				
2	106341011	RES. 6.34K OHM MF 1/4W 1%	1.0000	EA		B				
2	101583011	RES. 158K OHM MF 1/4W 1%	1.0000	EA		B				
2	103741011	RES. 3.74K OHM MF 1/4W 1%	1.0000	EA		B				
2	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B				
2	102151011	RES. 2.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B				
2	101151011	RES. 1.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	109533011	RES. 953K OHM MF 1/4W 1%	1.0000	EA		B				
2	105900011	RES. 590 OHM MF 1/4W 1%	1.0000	EA		B				
2	101964011	RES. 1.96M OHM MF 1/4W 1%	1.0000	EA		B				
2	102870011	RES. 287 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104124011	RES. 4.12M OHM MF 1/4W 1%	1.0000	EA		B				
1	NLR711-D	NEW 'N'# FOR LR711-D	1.0000	EA		M P				
2	LR711-D	DET ASSY FOR SPL# R711	1.0000	EA		M P				
3	LR711-D/01	SEE EXTENDED DESCRIPTION	3.0000	EA		B P				
3	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
3	640552	FILTER, BANDPASS	1.0000	EA		B				
3	590792	DETECTOR INGAAS 1.6 MICRO	1.0000	EA		B				
3	LR711-D/02	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
3	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
3	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
3	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
3	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
3	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
3	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
3	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
3	200204130	SCREW #2-56 X 1/8 BH SLOT	1.0000	EA		B				
3	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
3	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-96		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-96		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-99		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-99		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-96		
4	LDN200/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-96		
4	LDN200/02	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-96		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-96		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-96		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-96		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		

BOM Number : DN#805 - IRCON INFRARAIL IRT

SO-LI: 70166\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	StartUse	End Use
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	100000990	JUMPER DUMMY RESISTOR	4.0000	EA		B	3769	08-05-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-96		
4	102001011	RES. 2.00K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-96		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-96		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-96		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-96		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-96		
4	551122	CHOKER 9250-122 1.2 UH, 1	2.0000	EA		B	3769	08-05-96		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-96		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-96		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-96		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-96		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-96		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-96		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-96		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-96		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-96		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-96		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-96		
4	LDN200/04	SEE EXTENDED DESCRIPTION	6.0000	EA		B P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-96		
4	LDN200/05	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-96		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-96		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-96		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-96		
4	LDN100/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	1.0000	EA		B P				
4	532982	OP-AMP AD548CQ LOW PWR BI	1.0000	EA		B	3767	08-07-96		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-96		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-96		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-96		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-96		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		

BOM Number : DN#805 - IRCON INFRARAIL IRT

SO-LI: 70166\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-96		
4	551122	CHOKER 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-96		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-96		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-96		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-96		
4	521962	CAP. NPO 10pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-96		
4	LDN100/03	SEE EXTENDED DESCRIPTION	7.0000	EA		B P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-96		
4	LDN100/04	SEE EXTENDED DESCRIPTION	6.0000	EA		B P				
4	526002	CAP. SMC 330PF NPO 50V 5%	1.0000	EA		B	3767	08-07-96		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-96		
4	LDN100/05	SEE EXTENDED DESCRIPTION	3.0000	EA		B P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-96		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-96		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-96		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-96		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-97		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	4.0000	EA		B P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONN-	1.0000	EA		M P	3671	04-08-96		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 10% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-96		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-96		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-96		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-96		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-96		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-96		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-96		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-96		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-96		



# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SCHEDULED SHIPPING WEEK		MONTH/DAY/YEAR	
ENDING		08/22/98	
OUR ORDER NO.	ORDER DATE	MONTH/DAY/YEAR	
SA 066059/00		07/15/98	
YOUR ORDER NO.		D-6374	
TERMS	NET 30		
X	OTHER	NET 60	
F.O.B.	NILES, ILLINOIS		
X			
CODE	726 .00		
VIA	MSAS	PPD.	COLL.
		X	
SPECIAL SHIPPING INSTRUCTIONS			

SOLD TO CUSTOMER NO. 008241

IRCON GMBH  
POSTFACH 1361, D-65221  
TAUNUSSTEIN, GRILLPARZERSTR 40  
GERMANY

SHIPPING ADDRESS TAX CODE NO TAX

INTROPA  
SPEDITIONSGESELLSCHAFT GMBH  
FRANKFURT AIRPORT  
ZUR VERFUEGUNG IRCONGMBH

7/15/98 PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR XXXXXXXX	AMOUNT U.S. DOLLAR XXXXXXXX
01		1	INFRARAIL TEMPERATURE SYSTEM MODEL DNE31-99C SERIAL NBR 002599	EA		1421.52	1421.52
			CABLE(S) 4 MET. EA ( 4 MET. EA INCLUDED IN ABOVE)				
			PRODUCT MODIFICATION CHARGES			88.85	88.85
			***** * * SPECIAL Z999 * *****				
			!!!!!!!!!!!!WARNING!!!!!!!!!!!!				
			** SPL # TO BE DETERMINED **				
			** SEE ENGINEERING DEPT. **				
			SUB TOTALS				1510.37
			GRAND TOTAL				1510.37
			BILLINGS IN D.M.				

*Reds Special No R711 - Temp range 500-1300c*

*PAB 2/16/98*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SCHEDULED SHIPPING WEEK ENDING MONTH/DAY/YEAR 07/04/98

OUR ORDER NO. SA 065778/00 ORDER DATE MONTH/DAY/YEAR 05/28/98

YOUR ORDER NO. D-6302

TERMS NET 30  
X OTHER NET 60

F.O.B. X NILES, ILLINOIS

CODE 726 .00

VIA MSAS PPD. X COLL.

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. 00B241

IRCON GMBH  
POSTFACH 1361, D-65221  
TAUNUSSTEIN, GRILLPARZERSTR 40  
GERMANY

SHIPPING ADDRESS TAX CODE NO TAX

INTROPA  
SPEDITIONSGESELLSCHAFT GMBH  
FRANKFURT AIRPORT  
ZUR VERFUEGUNG IRCONGMBH

05/29/98 PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR X	AMOUNT U.S. DOLLAR X
01		1	INFRARAIL TEMPERATURE SYSTEM MODEL DNE31-99C SERIAL NBR 002382	EA		1421.52	1421.52
			CABLE(S) 30 MET. EA ( 4 MET. EA INCLUDED IN ABOVE)			4.18	108.57
			PRODUCT MODIFICATION CHARGES ***** * SPECIAL Z999 <i>Reds Special No. R711-Temp</i> * ***** !!!!!!!!!!WARNING!!!!!!!!!! <i>range 500-1300C</i> ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **			88.85	88.85
02	140052	1	WA-3 WATER COOLED ADAPTOR	EA		151.04	151.04
03	140062	1	AA-3 AIR PURGE ACCESSORY	EA		151.04	151.04
04	L12159	1	AP-1 FLANGED ACCY ADAPTOR PLT	EA		124.38	124.38
05	050312	1	INFRARAIL MANUAL <del>(CONTINUED ON NEXT PAGE)</del>	EA		.00	.00

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SCHEDULED SHIPPING WEEK MONTH/DAY/YEAR  
ENDING 05/16/98

OUR ORDER NO. ORDER DATE MONTH/DAY/YEAR  
SA 065491/00 04/06/98

YOUR ORDER NO. D-6246

TERMS NET 30  
X OTHER NET 60

F.O.B. X NILES, ILLINOIS

CODE 726 .00

VIA MSAS PPD. X COLL.

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. 008241

IRCON GMBH  
POSTFACH 1361, D-65221  
TAUNUSSTEIN, GRILLPARZERSTR 40  
GERMANY

SHIPPING ADDRESS TAX CODE NO TAX

INTROPA  
SPEDITIONSGESELLSCHAFT GMBH  
FRANKFURT AIRPORT  
ZUR VERFUEGUNG IRCONGMBH

04/06/98

PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR XXXXXXXXXX	AMOUNT U.S. DOLLAR XXXXXXXXXX
01		3	INFRARAIL TEMPERATURE SYSTEM MODEL DNE31-99C SERIAL NBR 002317 THRU 002319  CABLE(S) 4 MET. EA ( 4 MET. EA INCLUDED IN ABOVE)  PRODUCT MODIFICATION CHARGES ***** * SPECIAL Z999 <i>Reds 5* Special No R 711-Temp</i> * <i>range 500 To 1300c</i> ***** !!!!!!!!!!!!WARNING!!!!!!!!!!!! ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **	EA		1421.52	4264.56
						88.85	266.55
02		2	INFRARAIL TEMPERATURE SYSTEM MODEL DNE31-13C SERIAL NBR 002320 THRU 002321  CABLE(S) 4 MET. EA ( 4 MET. EA INCLUDED IN ABOVE)  <i>Reds 5* Special No R 711-Temp</i> <i>range 500 To 1300c</i> <i>Philly</i> <i>fln</i>	EA		1421.52	2843.04

~~(CONTINUED ON NEXT PAGE)~~

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SCHEDULED SHIPPING WEEK ENDING MONTH/DAY/YEAR 05/17/97

OUR ORDER NO. SA 063182/00 ORDER DATE MONTH/DAY/YEAR 03/17/97

YOUR ORDER NO. D-5820

TERMS NET 30  
 OTHER NET 60

F.O.B.  NILES, ILLINOIS

CODE 726 .00

VIA DANZAS PPD.  COLL.

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. 008241

IRCON GMBH  
POSTFACH 1361, D-65221  
TAUNUSSTEIN, GRILLPARZERSTR 40  
GERMANY

SHIPPING ADDRESS TAX CODE NO TAX

INTROPA  
SPEDITIONSGESELLSCHAFT GMBH  
FRANKFURT AIRPORT  
ZUR VERFUEGUNG IRCONGMBH

3/17/97

PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR X	AMOUNT U.S. DOLLAR X
01		4	INFRARAIL TEMP SYSTEM W/O CBL MODEL DNE31-99C SERIAL NBR 001620 THRU 001623  SPECIAL ENGINEERING CHARGES ***** * SPECIAL Z999 * ***** !!!!!!!!!!WARNING!!!!!!!!!! ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **	EA		1217.20	4868.80
						593.39	2373.56
02	L12102	4	AA-4 AIR PURGE ASSEMBLY	EA		129.33	517.32
03	451292	4	MB-1 MOUNTING BRACKET	EA		38.04	152.16
04	050312	3	INFRARAIL MANUAL	EA		.00	.00
05	L11201	4	KIT CABLE E/F INT/EXT - S EXT	EA		.00	.00
			SUB TOTALS				7911.80

*New Special Temperature range of 500 to 1300C with DNGAS Detector*  
*Per Worksheet*

~~(CONTINUED ON NEXT PAGE)~~

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95



# Engineering Special or System Request

From: R # Brecken Date: 10/8/96 Page      of       
 To: Joe Lakner Customer: IRCON GMBH

Description of Request: DNE31-99C  
 Base standard model or series:     

Special Temp range 500 to 1300C  
 with Silicon Detector if not  
 with INGaAs Detector if possible  
 Price for one

Details of specific approval:     

Silicon: No way  
 ESTIMATE OF  $I_{sc}^{500C} \approx 20 nA$   
 # 750 fiddler 1<sup>st</sup> unit  
 275 additional  
 ACCURACY 1.0% OF F.S..  
 & restricted to 0.3 min For Fict 20% of span

Specific Exceptions:       
      
    

Price: SEE ABOVE  
 (adder to standard)  
 Delivery: 1-2 wks  
 (adder to standard)  
 Approved by: [Signature]  
 Date: 10/9/96

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SCHEDULED SHIPPING WEEK **ENDING** MONTH/DAY/YEAR **09/13/97**

SOLD TO CUSTOMER NO. **008241**

OUR ORDER NO. **SA 063980/00** ORDER DATE MONTH/DAY/YEAR **07/23/97**

IRCON GMBH  
POSTFACH 1361, D-65221  
TAUNUSSTEIN, GRILLPARZERSTR 40  
GERMANY

YOUR ORDER NO. **D-5945**

TERMS NET 30  
**X** OTHER **NET 60**

F.O.B. **X** NILES, ILLINOIS

SHIPPING ADDRESS TAX CODE **NO TAX**

CODE **726 .00**

INTROPA  
SPEDITIONSGESELLSCHAFT GMBH  
FRANKFURT AIRPORT  
ZUR VERFUEGUNG **IRCONGMBH**

VIA **MSAS** PPD. **X** COLL.

SPECIAL SHIPPING INSTRUCTIONS

7/23/97 PAGE 1

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U/SXDOLKAFX	AMOUNT U/SXDOLKAFX
01		1	INFRARAIL TEMP SYSTEM W/D CBL MODEL DNE31-99C SERIAL NBR 001936	EA		1421.52	1421.52
			PRODUCT MODIFICATION CHARGES ***** * SPECIAL Z999 <i>Reds Special NR 711-Temp</i> * <i>range 500-1300c</i> ***** !!!!!!!!!!WARNING!!!!!!!!!! ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **			88.85	88.85
02	L11201	1	KIT CABLE E/F INT/EXT - S EXT	EA		.00	.00
			SUB TOTALS				1510.37
			GRAND TOTAL				1510.37
						BILLINGS IN D.M.	

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Ship To: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95

## Section 1 — GENERAL INFORMATION

### 1.5 SPECIAL MODIFICATIONS

IRCON InfraRail Model DNE31-99C, Serial No. 001620 through 001623 are modified for a special temperature range of 500 to 1300°C with a special optical resolution of D/100 . The wavelength specified is 1.49 - 1.6  $\mu\text{m}$ .

**RESTRICTIONS:** Accuracy specification is derated to 1.0 % of Full Scale temperature for this temperature span. Emissivity is restricted to a minimum setting of 0.3 for the first 50°C of the temperature range.

The modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R711.

**NOTE:** Ircon, Inc. is the sole owner in all respects of anyproduct or software modification or design herein specified.

w/o 65778

## Section 1 — GENERAL INFORMATION

### 1.5 SPECIAL MODIFICATIONS

IRCON InfraRail Model DNE31-99C, Serial No. 002382 is modified for a special temperature range of 500 to 1300°C with a special optical resolution of D/100 . The wavelength specified is 1.49 - 1.6  $\mu\text{m}$ .

RESTRICTIONS: Accuracy specification is derated to 1.0 % of Full Scale temperature for this temperature span. Emissivity is restricted to a minimum setting of 0.3 for the first 50°C of the temperature range.

The modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R711.

NOTE: Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

W/O 66059

## Section 1 — GENERAL INFORMATION

### 1.5 SPECIAL MODIFICATIONS

IRCON InfraRail Model DNE31-99C, Serial No. 002599 is modified for a special temperature range of 500 to 1300°C with a special optical resolution of D/100 . The wavelength specified is 1.49 - 1.6  $\mu\text{m}$ .

**RESTRICTIONS:** Accuracy specification is derated to 1.0 % of Full Scale temperature for this temperature span. Emissivity is restricted to a minimum setting of 0.3 for the first 50°C of the temperature range.

The modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R711.

**NOTE:** Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

## Section 1 — GENERAL INFORMATION

### 1.5 SPECIAL MODIFICATIONS

IRCON InfraRail Model DNE31-99C, Serial Nos. 002317 through 002319 are modified for a special temperature range of 500 to 1300°C with a special optical resolution of D/100 . The wavelength specified is 1.49 - 1.6  $\mu\text{m}$ .

**RESTRICTIONS:** Accuracy specification is derated to 1.0 % of Full Scale temperature for this temperature span. Emissivity is restricted to a minimum setting of 0.3 for the first 50°C of the temperature range.

The modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R711.

**NOTE:** Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 001822

STIG LIHAGEN PYROMETER.  
STORA HUNDENS GATA 566  
HANINGE, 136 64  
SWEDEN

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

STIG LIHAGEN PYROMETER.  
STORA HUNDENS GATA 566  
HANINGE, 136 64  
SWEDEN

REQUEST DATE (MM-DD-YY) 12-10-99 PROMISE DATE (MM-DD-YY) 12-10-99

OUR ORDER NO. 72197 ORDER DATE (MM-DD-YY) 11-05-99

YOUR ORDER NO. D-1192

TERMS 0.00/0/60

F.O.B. ORIGIN

CODE 1054 (100.00)

VIA UPS INTL

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#2994 <i>w.o. 3392</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMLETE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 19.8000 - Add Cbl Lgth in ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	1	0.00	1720.60	1720.60
<b>GRAND TOTAL</b>						<b>USD1,720.60</b>

*Handwritten notes in table:*  
 - Above table: *992*  
 - In description: *Redo Special No R 711 - Temp range 500-1300C*  
 - In description: *R+B*  
 - In description: *u/g*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY) 06-02-00 PROMISE DATE (MM-DD-YY) 06-02-00

OUR ORDER NO. 74060 ORDER DATE (MM-DD-YY) 05-10-00

YOUR ORDER NO. 200040309

TERMS 0.00/0/180

F.O.B.

CODE 1001 (100.00)

VIA MSAS

SPECIAL SHIPPING INSTRUCTIONS 1035/14392/0/35

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

*aac*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-HO#5360 <i>w.o.#6576</i>	DN_DNE31-13C IRCON INFRARAIL IRT SENSING HEAD ONLY  Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	2	0.00	484.00	968.00
2	MOD-CHARGES	MODIFICATION OF PRODUCT	2	0.00	110.00	220.00
					<b>GRAND TOTAL</b>	

*Redo Special to R711  
Temp range 500-1300C  
R+B  
5/10*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

W.O. #6576

BOM Number : DN-HO#5360 - IRCON INFRARAIL IRT SO-LI: 74060\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	StartUse	End Use
1	DN1DNE	DN PRICES	1.0000	EA		M P				
1	C11201-R711	SENSING HEAD FINAL ASSY	1.0000	EA		M P				
2	451322	FIELD STOP .022DIA	1.0000	EA		B	3709	05-17-96		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	990300005	RETAINING RING 7/16 OD,.2	1.0000	EA		B	3709	05-17-96		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-96		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M P	3709	05-17-96		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M P	3770	08-21-96		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
4	640552	FILTER, BANDPASS	1.0000	EA		B				
4	590792	DETECTOR INGAAS 1.6 MICRO	1.0000	EA		B				
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
4	200204130	SCREW #2-56 X 1/8 BH SLOT	1.0000	EA		B				
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-96		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-96		
2	990100004	EPOXY HB FULLER FE 7004	1.0000	EA		B	3709	05-17-96		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-96		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-96		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-96		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-96		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-96		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-96		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-96		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-96		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-96		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-96		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-96		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-96		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-96		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-96		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B	3709	05-17-96		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-96		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-96		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-96		

R711

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY)

06-23-00

PROMISE DATE (MM-DD-YY)

06-23-00

OUR ORDER NO.

74357

ORDER DATE (MM-DD-YY)

06-09-00

YOUR ORDER NO.

200040403

TERMS

0.00/0/180

F.O.B.

CODE

1001 (100.00)

VIA

MSAS

SPECIAL SHIPPING INSTRUCTIONS

1035/14392/0/35

SOLD TO

CUSTOMER NO.

100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT

THE NETHERLANDS

SHIPPING ADDRESS

TAX CODE

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT

THE NETHERLANDS

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-EM#5778 <i>W.O.# 6844</i>	<p><i>aac</i></p> <p>DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY</p> <p>Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C</p> <p>DN_DNE31-13C</p> <p><i>Redo Spec No R711- Temp range 500-1300C</i></p> <p><i>mod-clg \$50</i></p>	1	0.00	475.20	475.20
<b>GRAND TOTAL</b>						<b>ECU475.20</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

INFRAIL SPECIAL NUMBER R711 CONTINUED,

BILL OF MATERIAL

MODULE M1 REFERENCE: DWG.NO.C11194

SYMBOL	PART NO.	DESCRIPTION		
R1	103013011	RESISTOR	301 Kohm	METAL FILM 1/4W 1%
R44	101872011	RESISTOR	18.7 Kohm	METAL FILM 1/4W 1%
R54	101303011	RESISTOR	130 Kohm	METAL FILM 1/4W 1%
R45	101502011	RESISTOR	15.0 Kohm	METAL FILM 1/4W 1%
R55	105762011	RESISTOR	57.6 Kohm	METAL FILM 1/4W 1%
R46	101002011	RESISTOR	10.0 Kohm	METAL FILM 1/4W 1%
R56	109312011	RESISTOR	93.1 Kohm	METAL FILM 1/4W 1%
R47	106341011	RESISTOR	6.34 Kohm	METAL FILM 1/4W 1%
R57	101583011	RESISTOR	158 Kohm	METAL FILM 1/4W 1%
R48	103741011	RESISTOR	3.74 Kohm	METAL FILM 1/4W 1%
R58	102743011	RESISTOR	274 Kohm	METAL FILM 1/4W 1%
R49	102151011	RESISTOR	2.15 Kohm	METAL FILM 1/4W 1%
R59	104993011	RESISTOR	499 Kohm	METAL FILM 1/4W 1%
R50	101151011	RESISTOR	1.15 Kohm	METAL FILM 1/4W 1%
R60	109533011	RESISTOR	953 Kohm	METAL FILM 1/4W 1%
R51	105900011	RESISTOR	590 ohm	METAL FILM 1/4W 1%
R61	101964011	RESISTOR	1.96 Mohm	METAL FILM 1/4W 1%
R52	102870011	RESISTOR	287 ohm	METAL FILM 1/4W 1%
R53	102260011	RESISTOR	226 ohm	METAL FILM 1/4W 1%
R62	104124011	RESISTOR	4.12 Mohm	METAL FILM 1/4W 1%

W.O.#7276

BOM Number : DN-EM#6379 - IRCON INFRARAIL IRT

SO-LI: 74844\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
1	DN2DN	DN PRICES	1.0000	EA		M P				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-96		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-96		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-99		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-99		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-96		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-96		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-96		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-96		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-96		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-96		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-96		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-96		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-96		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-96		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-96		
4	551122	CHOKO 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-96		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-96		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-96		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-96		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-96		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-96		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-96		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-96		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-96		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-96		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-96		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-96		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-96		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				

R711

(PROCESSOR MODULE ONLY)

BOM Number : DN-EM#6379 - IRCON INFRARAIL IRT

SO-LI: 74844\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-96		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-96		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-96		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-96		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR BI	1.0000	EA		B	3767	08-07-96		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-96		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-96		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-96		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-96		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-96		
4	551122	CHOKO 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-96		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-96		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-96		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-96		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-96		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-96		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-96		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-96		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-96		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-96		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-96		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-96		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-97		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				

BOM Number : DN-EM#6379 - IRCON INFRARAIL IRT

SO-LI: 74844\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	StartUse	End Use.
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONN	1.0000	EA		M P	3671	04-08-96		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-96		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-96		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-96		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-96		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-96		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-96		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-96		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-96		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-96		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-96		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-96		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-96		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-96		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-96		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-96		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-96		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-96		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-96		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-96		
1	U-M1-R711	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P				
2	103013011	RES. 301K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101303011	RES. 130K OHM MF 1/4W 1%	1.0000	EA		B				
2	101502011	RES. 15.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	105762011	RES. 57.6K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	109312011	RES. 93.1K OHM MF 1/4W 1%	1.0000	EA		B				
2	106341011	RES. 6.34K OHM MF 1/4W 1%	1.0000	EA		B				
2	101583011	RES. 158K OHM MF 1/4W 1%	1.0000	EA		B				
2	103741011	RES. 3.74K OHM MF 1/4W 1%	1.0000	EA		B				
2	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B				
2	102151011	RES. 2.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B				
2	101151011	RES. 1.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	109533011	RES. 953K OHM MF 1/4W 1%	1.0000	EA		B				
2	105900011	RES. 590 OHM MF 1/4W 1%	1.0000	EA		B				
2	101964011	RES. 1.96M OHM MF 1/4W 1%	1.0000	EA		B				

BOM Number : DN-EM#6379 - IRCON INFRARAIL IRT

SO-LI: 74844\*1

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	ECO Date	StartUse	End Use.
2	102870011	RES. 287 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104124011	RES. 4.12M OHM MF 1/4W 1%	1.0000	EA		B				

BOM Number : DN#1076 - IRCON INFRARAIL IRT

SO-LI: 70434\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
1	DN0DNE	DN PRICES	1.0000	EA		M P				
1	C11201	SENSING HEAD FINAL ASSEMB	1.0000	EA		M P				
2	451322	FIELD STOP .022DIA	1.0000	EA		B	3709	05-17-96		
2	C11201/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B	3709	05-17-96		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-96		
2	C11209-271	SH DETECTOR ASSEMBLY (E-S	1.0000	EA		M P	3709	05-17-96		
3	T-C11209-1	SELECT DET. ASSY. (E-SERI	1.0000	EA		B	3770	08-21-96		
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-96		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-96		
2	990100004	EPOXY HB FULLER FE 7004	1.0000	EA		B	3709	05-17-96		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-96		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-96		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-96		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-96		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-96		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-96		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-96		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-96		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-96		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-96		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-96		
2	C11201/02	SEE EXTENDED DESCRIPTION	3.0000	EA		B				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-96		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-96		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-96		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	1.0000	EA		B	3709	05-17-96		
2	C11201/03	SEE EXTENDED DESCRIPTION	5.0000	EA		B				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-96		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-96		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-96		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B	3913	04-02-97		
2	D11198/01	SEE EXTENDED DESCRIPTION	3.0000	EA		B				
2	D11198/02	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		B				
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B	3913	04-02-97		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B	3913	04-02-97		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B	3913	04-02-97		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B	3913	04-02-97		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B	3913	04-02-97		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B	3913	04-02-97		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M P	3913	04-02-97		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B	3913	04-02-97		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B				
1	U-M1-R711	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P				
2	103013011	RES. 301K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101303011	RES. 130K OHM MF 1/4W 1%	1.0000	EA		B				
2	101502011	RES. 15.0K OHM MF 1/4W 1%	1.0000	EA		B				

BOM Number : DN#1076 - IRCON INFRARAIL IRT

SO-LI: 70434\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use
2	105762011	RES. 57.6K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	109312011	RES. 93.1K OHM MF 1/4W 1%	1.0000	EA		B				
2	106341011	RES. 6.34K OHM MF 1/4W 1%	1.0000	EA		B				
2	101583011	RES. 158K OHM MF 1/4W 1%	1.0000	EA		B				
2	103741011	RES. 3.74K OHM MF 1/4W 1%	1.0000	EA		B				
2	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B				
2	102151011	RES. 2.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B				
2	101151011	RES. 1.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	109533011	RES. 953K OHM MF 1/4W 1%	1.0000	EA		B				
2	105900011	RES. 590 OHM MF 1/4W 1%	1.0000	EA		B				
2	101964011	RES. 1.96M OHM MF 1/4W 1%	1.0000	EA		B				
2	102870011	RES. 287 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104124011	RES. 4.12M OHM MF 1/4W 1%	1.0000	EA		B				
1	NLR711-D	NEW 'N'# FOR LR711-D	1.0000	EA		M P				
2	LR711-D	DET ASSY FOR SPL# R711	1.0000	EA		M P				
3	LR711-D/01	SEE EXTENDED DESCRIPTION	3.0000	EA		B P				
3	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
3	640552	FILTER, BANDPASS	1.0000	EA		B				
3	590792	DETECTOR INGAAS 1.6 MICRO	1.0000	EA		B				
3	LR711-D/02	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
3	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
3	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
3	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
3	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
3	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
3	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
3	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
3	200204130	SCREW #2-56 X 1/8 BH SLOT	1.0000	EA		B				
3	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
3	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-96		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-96		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-99		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-99		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-96		
4	LDN200/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-96		
4	LDN200/02	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-96		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-96		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-96		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-96		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		

BOM Number : DN#1076 - IRCON INFRARAIL IRT

SO-LI: 70434\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	StartUse	End Use
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	100000990	JUMPER DUMMY RESISTOR	4.0000	EA		B	3769	08-05-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-96		
4	102001011	RES. 2.00K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-96		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-96		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-96		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-96		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-96		
4	551122	CHOKER 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-96		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-96		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-96		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-96		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-96		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-96		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-96		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-96		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-96		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-96		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-96		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-96		
4	LDN200/04	SEE EXTENDED DESCRIPTION	6.0000	EA		B P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-96		
4	LDN200/05	SEE EXTENDED DESCRIPTION	5.0000	EA		B P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-96		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-96		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-96		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-96		
4	LDN100/01	SEE EXTENDED DESCRIPTION	8.0000	EA		B P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	1.0000	EA		B P				
4	532982	OP-AMP AD548CQ LOW PWR BI	1.0000	EA		B	3767	08-07-96		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-96		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-96		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-96		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-96		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		

BOM Number : DN#1076 - IRCON INFRARAIL IRT

SO-LI: 70434\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-96		
4	551122	CHOKER 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-96		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-96		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-96		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-96		
4	521962	CAP. NPO 10pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-96		
4	LDN100/03	SEE EXTENDED DESCRIPTION	7.0000	EA		B P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-96		
4	LDN100/04	SEE EXTENDED DESCRIPTION	6.0000	EA		B P				
4	526002	CAP. SMC 330PF NPO 50V 5%	1.0000	EA		B	3767	08-07-96		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-96		
4	LDN100/05	SEE EXTENDED DESCRIPTION	3.0000	EA		B P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-96		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-96		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-96		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-96		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-97		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	4.0000	EA		B P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-96		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 10% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-96		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-96		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-96		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-96		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-96		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-96		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-96		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-96		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-96		



# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 003213

CHINA STEEL CORPORATION  
1, CHUNG KANG ROAD  
HSIAO KANG, KAOHSIUNG 812  
TAIWAN,  
P.R. CHINA

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

CHINA STEEL CORPORATION  
1, CHUNG KANG ROAD  
HSIAO KANG, KAOHSIUNG 812  
TAIWAN,  
P.R. CHINA

REQUEST DATE (MM-DD-YY) 03-30-01 PROMISE DATE (MM-DD-YY) 03-30-01

OUR ORDER NO. 76852 ORDER DATE (MM-DD-YY) 03-07-01

YOUR ORDER NO. 90C1U0262

TERMS

Letter of Credit

F.O.B.

ORIGIN

CODE

1059 (100.00)

VIA

BAX GLOBAL

SPECIAL SHIPPING INSTRUCTIONS

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#8873 <i>w.o. #9011</i>	<i>99c</i> DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	3	0.00	2130.00	6390.00
					<i>Reds Special No R711</i>	<i>Temp range 500 to 1300C</i>
					<i>3/7</i>	
<b>GRAND TOTAL</b>						<b>USD6,390.00</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

BOM Number : DN#2994 - IRCON INFRARAIL IRT

SO-LI: 72197\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use
1	DNODNE	DN PRICES	1.0000	EA		M P				
1	560052	CABLE PVC 2 COND 1100/200	19.8000	FT		B				
1	C11201-R711	SENSING HEAD FINAL ASSY	1.0000	EA		M P				
2	451322	FIELD STOP .022DIA	1.0000	EA		B	3709	05-17-96		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	990300005	RETAINING RING 7/16 OD,.2	1.0000	EA		B	3709	05-17-96		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-96		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M P	3709	05-17-96		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M P	3770	08-21-96		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
4	640552	FILTER, BANDPASS	1.0000	EA		B				
4	590792	DETECTOR INGAAS 1.6 MICRO	1.0000	EA		B				
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
4	200204130	SCREW #2-56 X 1/8 BH SLOT	1.0000	EA		B				
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-96		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-96		
2	990100004	EPOXY HB FULLER FE 7004	1.0000	EA		B	3709	05-17-96		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-96		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-96		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-96		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-96		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-96		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-96		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-96		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-96		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-96		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-96		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-96		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-96		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-96		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-96		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B	3709	05-17-96		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-96		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-96		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-96		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B	3913	04-02-97		
2	D11198/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	D11198/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				

R711

BOM Number : DN#2994 - IRCON INFRARAIL IRT

SO-LI: 72197\*1

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	ECO Date	StartUse	End Use.
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		M				
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B	3913	04-02-97		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B	3913	04-02-97		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B	3913	04-02-97		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B	3913	04-02-97		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B	3913	04-02-97		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B	3913	04-02-97		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M P	3913	04-02-97		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B	3913	04-02-97		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B				
1	U-M1-R711	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P				
2	103013011	RES. 301K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101303011	RES. 130K OHM MF 1/4W 1%	1.0000	EA		B				
2	101502011	RES. 15.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	105762011	RES. 57.6K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	109312011	RES. 93.1K OHM MF 1/4W 1%	1.0000	EA		B				
2	106341011	RES. 6.34K OHM MF 1/4W 1%	1.0000	EA		B				
2	101583011	RES. 158K OHM MF 1/4W 1%	1.0000	EA		B				
2	103741011	RES. 3.74K OHM MF 1/4W 1%	1.0000	EA		B				
2	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B				
2	102151011	RES. 2.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B				
2	101151011	RES. 1.15K OHM MF 1/4W 1%	1.0000	EA		B				
2	109533011	RES. 953K OHM MF 1/4W 1%	1.0000	EA		B				
2	105900011	RES. 590 OHM MF 1/4W 1%	1.0000	EA		B				
2	101964011	RES. 1.96M OHM MF 1/4W 1%	1.0000	EA		B				
2	102870011	RES. 287 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104124011	RES. 4.12M OHM MF 1/4W 1%	1.0000	EA		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-96		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-96		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-99		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-99		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-96		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-96		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-96		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-96		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-96		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-96		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		

BOM Number : DN#2994 - IRCON INFRARAIL IRT

SO-LI: 72197\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-96		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-96		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-96		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-96		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-96		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-96		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-96		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-96		
4	551122	CHOKO 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-96		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-96		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-96		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-96		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-96		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-96		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-96		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-96		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-96		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-96		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-96		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-96		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-96		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-96		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-96		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-96		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-96		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR BI	1.0000	EA		B	3767	08-07-96		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-96		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-96		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-96		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-96		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-96		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-96		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		

BOM Number : DN#2994 - IRCON INFRARAIL IRT

SO-LI: 72197\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-96		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-96		
4	551122	CHOKO 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-96		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-96		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-96		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-96		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-96		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-96		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-96		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-96		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-96		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-96		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-96		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-96		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-96		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-96		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-97		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONN	1.0000	EA		M P	3671	04-08-96		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-96		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-96		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-96		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-96		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-96		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-96		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-96		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-96		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-96		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-96		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-96		

BOM Number : DN#2994 - IRCON INFRARAIL IRT

SO-LI: 72197\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	StartUse	End Use.
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671		04-08-96	
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671		04-08-96	
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671		04-08-96	
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671		04-08-96	
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671		04-08-96	
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671		04-08-96	
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671		04-08-96	
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694		04-17-96	
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671		04-08-96	



# INFRARAIL CALIBRATION TEST REPORT

TECHNICIAN# 639 SERIAL# 8888

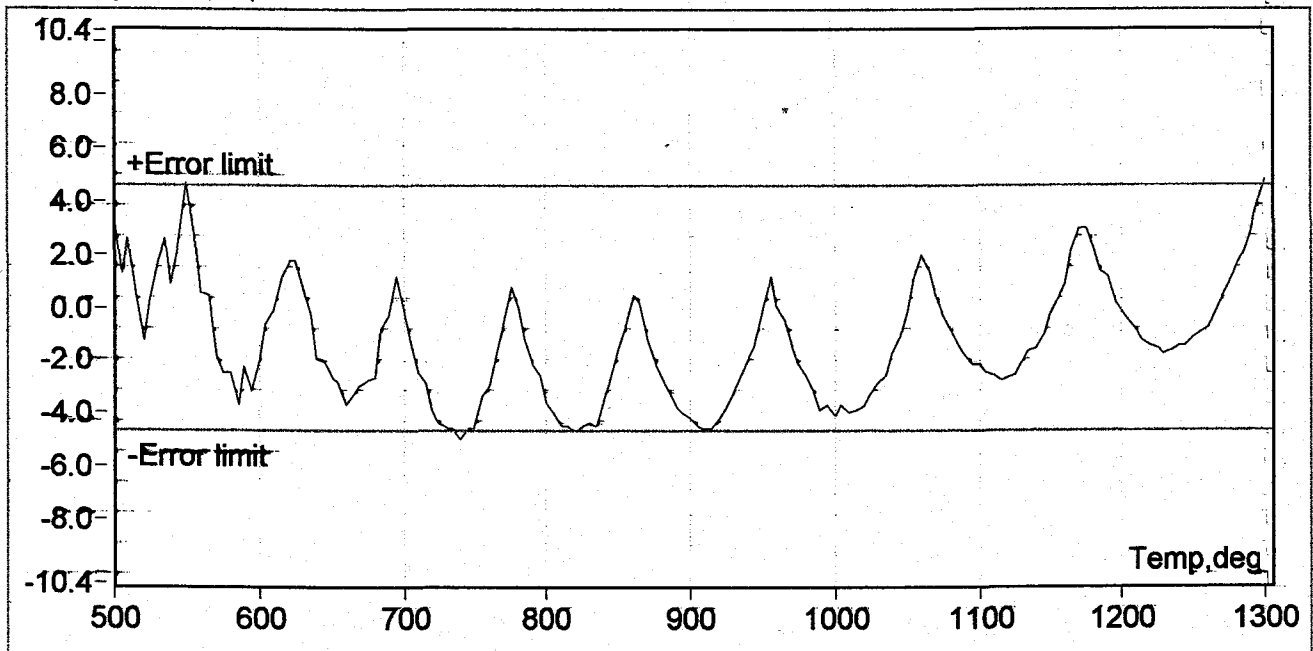
MODEL# DNE31-99C SPECIAL# R711

FULL SCALE 1300C FS CURRENT= 10.700  $\mu$ A  $\lambda_{max}$ = 1.60  
 ZERO SCALE 500C ZS CURRENT= 0.024  $\mu$ A  $\lambda_{min}$ = 1.49

TEST NAME	SPEC.	TEST RESULT	EVAL
1. REFERENCE 3.2 V	3.2 $\pm$ 0.005 V	3.200	P
2. CURRENT OUTPUT	4 $\pm$ 0.05 mA	4.09	P
	20 $\pm$ 0.05 mA	20.01	
3. LINEARIZER TEST			F
4. EMISSIVITY CONTROL			P
5. RESPONSE TIME	10 $\pm$ 2 S	9.0	P
	10 $\pm$ 2 mS	9.0	
6. P-P DECAY RATE	< 0.05%	0.042	P
	5 - 6.5 %	6.0	

OK A.D.  
 1% of F.S.

Temp. Error, deg



Tech# \_\_\_\_\_ DATE \_\_\_\_\_ QA# \_\_\_\_\_

4.75 - 4.87 - 4.96 M - 4.99M, 5.36M

475K 487 - 499K 511K - 523 - 536

TRY USING

45119-4  
0.014" (Def 5 stop)

measure  $I_{sc}$  with existing setup

Then put in

0.014" f. stop  
~~12.2  $\mu$ A~~ @ 2300°C

~~1.08~~ 1.300  $\mu$ A @ 2300°C

~~1.08~~ . 0.850

1.3  $\mu$ A  $I_{sc}$  12.2  $\mu$ A @ 2300°C  
.22  $\mu$ A , 850°C

R711  
Detector  $I_{sc}$   $T_{B3} = 2300^\circ C$

1.3  $\mu$ A

Detector  $I_{sc}$   $T_{B3}$  850°C = 0.22  $\mu$ A

(with 0.030 Detector f. stop) 9.26-2000 J.L

~~I.L~~