

## IRI 1002

### On-line Thermal Imager / Multipoint Radiometer

The IRI 1002 Thermal Imager provides real time imaging for use in process control and remote monitoring systems. With its light weight and small size coupled with ease of set up, it provides the ideal solution for such applications.

As with all IRISYS thermal imaging products the emphasis is on affordability, and this is broadening the range of applications for thermal imaging.

Typical applications for the IRI 1002 include:

- Process Control
- Remote Condition Monitoring
- Critical Vessel Monitoring
- Security/Surveillance
- Research and Development



**The IRI 1002 On-line Thermal Imager**

### **Product Description**

The on-line Thermal Imager is housed in a robust metal case. The imaging optics, detector, drive electronics and optical modulator are all enclosed in this case. Data output is provided through RS232 or CANbus.

A 2 metre cable for the RS232/CANbus link is provided as standard and the product can be specified either with a connector or cable gland.

### **Operation**

The detector used in the IRI 1002 is an IRISYS proprietary pyroelectric array. This views the external scene via a rotating disc modulator and imaging optics. Temperature data from the detector is sent via an RS232 or CANbus link to the controller or PC for processing. CANbus enables a number of compatible devices to be linked together.

It is envisaged that users and system integrators will devise specific software routines to provide a total control or monitoring system. IRISYS image analysis and temperature measurement software is available as an option.

# SPECIFICATION

## PERFORMANCE

Temperature range: -10°C to +150°C  
 (High temperature option: 600°C)  
 Field of view: 20° x 20°  
 (optional 10° x 10°)  
 Spectral Response: 8 to 14 micrometres  
 Temperature sensitivity: ~0.5K @ 30°C  
 Temperature readout: 256 pixels  
 RS232/CANbus  
 Detector: 16 x 16 pixel array  
 Frame rate: 6Hz

## COMPUTER INTERFACE

RS232 or CANbus via cable.  
 A 2 metre cable is supplied as standard.

## IMAGER POWER SUPPLY

12vDC via cable.

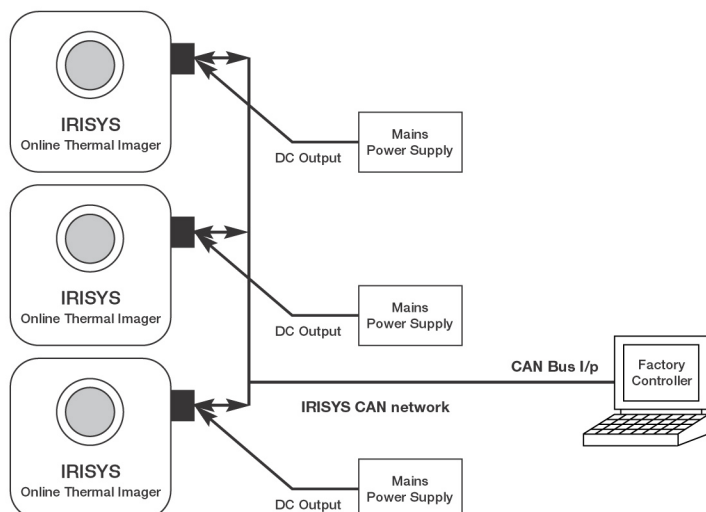
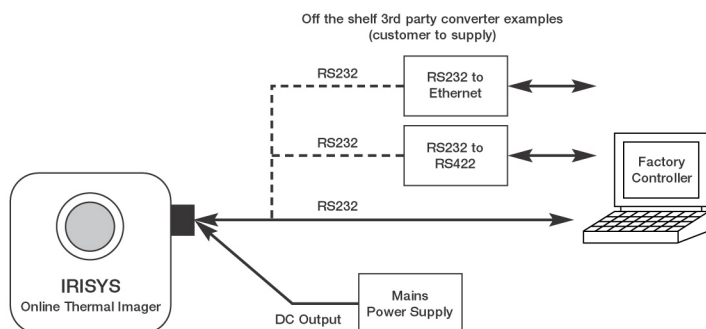
## MECHANICAL

Housing: Die-cast aluminium  
 Dimensions: 100mm x 110mm x 60mm  
 Weight: ≤ 0.7kg  
 Mounting: Mounting brackets supplied.

## OPTIONS

- 10° x 10° FOV lens and calibration.
- High temperature filter and calibration.
- Image analysis and measurement software.
- Rugged carrying case.

# TYPICAL CONFIGURATIONS



ENVIRONMENT			
IP rating:	IP64	Humidity:	10% to 100% non condensing
Temp. operating range:	-5°C to +50°C	CE Mark (Europe):	Complies with EMC directive
Temp. storage range:	-20°C to +80°C		

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**ABD**  
 Array-Based Detectors