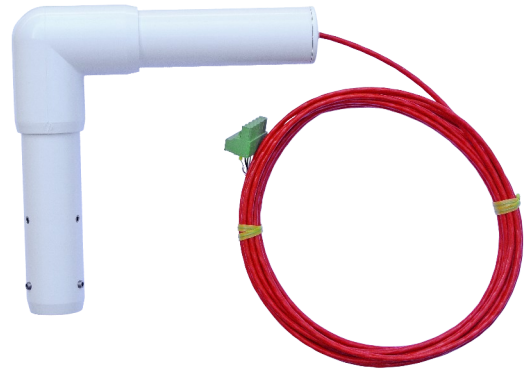


Infrared Thermometer IRT-201TM

*Preliminary * DATA SHEET

FEATURE SUMMARY

- Non-contact surface temp.
- Modbus, digital connection
- Fast response
- Optically focused
- Vented enclosure
- Automatic averaging
- Adjustable emissivity



DESCRIPTION

IRT-201TM gives a non-contact surface temperature of the target. Simply point the thermometer at the object, such as a road surface, roof, foliage, or storage tank.

IRT-201 connects directly to Dyacon weather stations. By combining surface temperature measurements with meteorological data users gain a full image of contributing characteristics.

Of course, like other Dyacon weather station data, **IRT-201** temperature is available on DyaconLive for real-time and charted historical information.

Since the wavelengths measured by **IRT-201** are not absorbed in clear air, there is no theoretical distance limit.

The 20:1 measurement cone means that at 12 ft (3.7 m), the measurement circle will be only about 7.7 inches (20 cm). At 20 ft, the measurement circle is only 12.5 inches (32 cm).

KEY FEATURES

Construction: **IRT-201** is a stainless steel instrument suspended in a PVC isolation enclosure.

The PVC enclosure can be configured as a closed, passively vented, or actively aspirated mounting system. Contact Dyacon for more information.

Measurement: Surface temperature and internal sensor temperature are both given digitally.

Measurement data is available through DyaconLive and on the LCD of Dyacon CM-1 weather station control module.

Installation: **IRT-201** mounts to standard 1 inch Sch 40 pipe and standard structural pipe fitting. This provides mounting flexibility using low-cost parts.

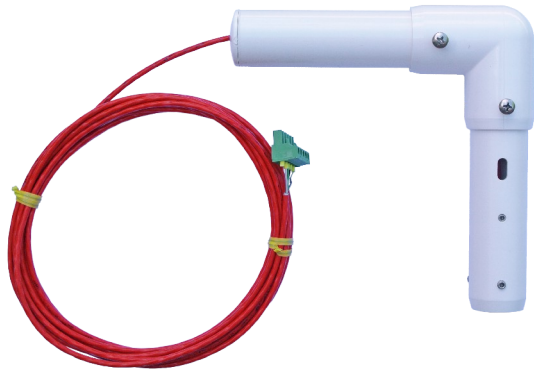
Once **IRT-201** is connected to Dyacon CM-1 weather station controller, the user can simply enable the instrument through the menu, and the measurements will be visible on the LCD and included in the log file and on DyaconLiveTM.

MEASUREMENT SPECIFICATIONS *

Accuracy	+/-1% of Reading or 1°C, whichever is greater
Repeatability	+/-0.5% of reading or 0.5°C, whichever is greater
Emissivity	0.2 to 1.0
Response Time	125 ms (90% response)
Spectral Range	8 to 14 μm
Measurement Spot	20:1 + 0.5 inch
Distance	Unlimited in clean air

MECHANICAL SPECIFICATIONS

Size	1.63 x 6.8 x 6.9 inch (17.3 x 17.5 cm) Non-vented version.
Materials	Stainless steel sensor UV-stabilized PVC isolation enclosure
Cable Length	Approximately 5 m (16.4 ft)
Cable Type	4-conductor, 22 AWG, FEP jacket



Un-vented configuration.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to 120°C
Liquid Sealed	IP 67

ELECTRICAL SPECIFICATIONS

Power	5 VDC to 24 VDC
Current	8.1 mAavg (when connected to CM-1)
Communication	Modbus RTU (RS-485) 19200 bps

Options

Passive Aspiration	PVC vent
Active Aspiration	12 VDC or 24 VDC fan and weather shield.

*Dyacon IRT-201 is manufactured by Calex Electronics. All measurement specifications are provided by the manufacturer.



Front view.



IRT-201 installed.