

ADVANCED PHOTONICS INTERNATIONAL, INC.
54 PLYMOUTH ROAD, WHITE PLAINS, NY 10603

**REMOTE PRECISION THERMOMETER
MODEL RST-10T/R**



APPLICATIONS

- **AERIAL SCANNING FOR**
Geological mapping
Vegetation studies
Pollution monitoring
Maritime surveillance
Heat loss detection
- **REMOTE THERMAL
MEASUREMENTS
OF CROP HEALTH**
- **THERMAL PROFILE OF
AFFLUENCE OR WATER
CURRENTS**

ADVANCED PHOTONICS INTERNATIONAL, INC. presents the **REMOTE SENSING THERMOMETER Model RST-10T/R**, an absolute calibration Thermometer /Radiometer designed for the measurement of infrared sources. The instrument combines a configurable optical sensing unit and a Laptop computer. The optical sensing unit can integrate different detector modules and different optical modules, including lenses, collecting mirrors and scan mirrors to meet specific applications.

The **REMOTE SENSING THERMOMETER Model RST-10** is a Laptop computer based instrument, which reads in absolute terms and is capable of collecting, processing, and storing data. both in temperature and radiance.

Our engineering staff can customize and analyze your needs to support your desired measurements.

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The **REMOTE SENSING THERMOMETER Model RST-10 T/R** can display real-time temperature or radiance. The instrument utilizes a laptop computer for display, control and data reduction.

The instrument is supplied with a complete "Turnkey" object oriented software package, using Windows. The program can be augmented by data reduction tools such as excel to accomplish additional data reduction.

SPECIFICATIONS	
OPTICS	SELECTABLE
FIELD OF VIEW	1 DEGREE STANDARD; 3 MILLIRADIANS TO 20 DEGREES
SPECTRAL RANGE	STANDARD 8-14 MICRONS SELECTABLE
TEMPERATURE READOUT	STANDARD -5 TO 45 C SELECTABLE
TEMPERATURE SENSITIVITY	.02 DEGREES C AT 1 HZ
SIGHTING	EXTERNAL
REFERENCE	INLINE HEATED
DETECTORS	SELECTABLE
ELECTRONICS	PC LAPTOP COMPUTER
BANDWIDTH	SELECTABLE
COMPUTER INTERFACE	RS-232C
OPERATING TEMPERATURE	0-50 DEGREES C
OPTICAL HEAD SIZE	DEPENDING ON OPTICS
POWER	110V-AC; 27 VOLTS-DC; 28 VOLTS-DC;

API engineering staff has many years of experience in developing Remote Sensing Instrumentation, please feel free to discuss your specific measurement needs so that we can customize the instrument to meet your specific requirements.

The **REMOTE SENSING THERMOMETER MODEL RST-10 T/R** offers the following selectable collecting optical assemblies, detectors and filters. The assemblies are designed to meet different application from airborne to fixed measurement from ground platforms

OPTICAL ASSEMBLIES	
P/N	ASSEMBLY
0-1	1.0 DEGREES
0-2	20 DEGREE MODULE
0-3	3 inch CASSIGRANIAN OPTICS FOV 2.5 MIL. ,RADIANS
0-X-1	1 AXIS SCANNING MIRROR ASSEMBLY

DETECTORS		
P / N	DETECTORS	WAVELENGTH
D-1	PYROELECTRIC	2.5-20 MICRONS
D-3	InSb (77K)	1-5 MICRONS
D-4	HgCdTe (77K)	2.5-12 MICRONS
D-5	HgCdTe (-40)	2-4 MICRONS

FILTERS	
P/N	WAVELENGTH
F8-14	8-14 MICRONS
F9.5-11.5	9.5-11.5 MICRONS
F10-12	10-12 MICRONS
F3-5	3-5 MICRONS

ADVANCED PHOTONICS INTERNATIONAL, INC. can offer other standard and customized remote sensing equipment to meet VARIES applications such as signature measurements, atmospheric transmission, spectral profiling. Please feel free to contact our engineering staff regarding your application needs.