

Airborne infrared radiometer : Synchronous brightness temperature measurement over three channels

This instrument allows to perform an accurate measurement of the radiance and of the brightness temperature of an aimed target over three channels. It was especially developed to be used in a displacement, airborne or transported on a vehicle for the thermogram of the roads.

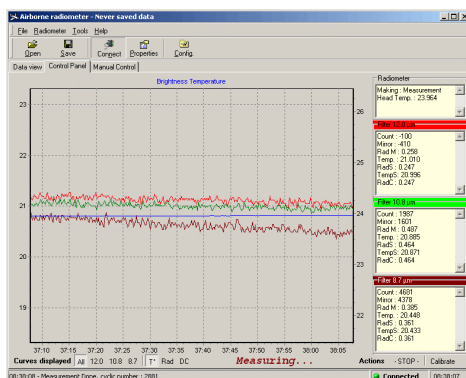
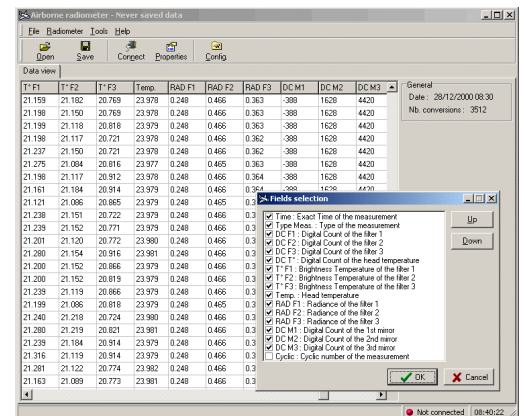
Specifications

- Optical head with three infrared bands

Standard channels	
CWL	HPBW
8.7 μm	1.0 μm
10.8 μm	1.0 μm
12.0 μm	1.0 μm

Other options	
CWL	HPBW
13.0 μm	1.0 μm
3 ASTER bands	

- Synchronous acquisition of the 3 radiances
 - Measurement frequency : 6.25 Hz (Europe) – 7.5 Hz (US)
 - N.E.D.T. at 20°C : 0.03°C RMS.
 - Measurement dating : Hundredth of second
 - G.P.S. coupling for the localization
 - High stability with time
 - Bandwidth : About 2 Hz
- Field of view : 3°
- Integrated temperature platinum sensor (temperature reference)
 - Resolution : 0.001 °C
 - Accuracy : 0.01 °C
- Fast in flight recalibration by manual triggerring
- Ranging temperature : -30°C to +50°C
- Insulated and pressurized double housing
- Reinforced insulation for airborne use
- Control and exploitation by PC : RS-232 serial link
- Maximum cable length : 150 m
- Power supply : 12 V - DC
- Weight : 2.4 kg - Size : Width 13 cm, Height 20 cm



Software : Airborne Radiometer 1.0

- Real-time graphical visualization of one channel or 3 channels :
 - Brightness temperature of the three channels
 - Target luminance of the three channels
 - Raw Digital Count of the three channels
- Security : Automatic data back-up during the measurement
- Possible display with configurable tabular
- ASCII transfer of selected parameters
- Windows 95 / 98 / ME / NT4 / 2000 Compatible



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