



TwiN1000

→ Characterization of IRFPA



TwiN1000

DOUBLE EXTENDED AREA

BLACKBODY

INTRODUCTION

The TwiN1000 double extended area blackbodies are absolute infrared reference sources. They can be used as low temperature infrared reference sources. They consist of a head with two independently regulated emissive surfaces. Their temperatures are controlled via a single electronic unit with PID adjusted regulator.

The emissive surfaces temperatures are controlled with high precision and stability at temperatures below or above ambient temperature. The two emissive surfaces temperatures are measured in real time thanks to high precision calibrated Pt sensors. The TwiN1000 blackbody is the ideal blackbody for applications which require calibration temperatures to jump from one to another within a second.

CONFIGURATION

- Two 42mm x 42mm emissive areas
- Independent control of the two emissive surfaces
- Real time display of emissive areas and set point temperatures
- Fast response time and high stability
- High thermal uniformity and emissivity
- Compact emissive head
- Absolute temperature range from -5°C to +150°C
- Control through touchscreen panel
- Radiometric calibration certificate
- Remote control via Ethernet, RS232 and IEEE488 link



→ TwiN1000

ADVANTAGES

- Compact head
- One electronic unit for two emissive areas
- Easily integrated in production testing line
- Two independent emissive areas for the price of one blackbody



OPTIONS

- LabVIEW drivers for all communication interfaces

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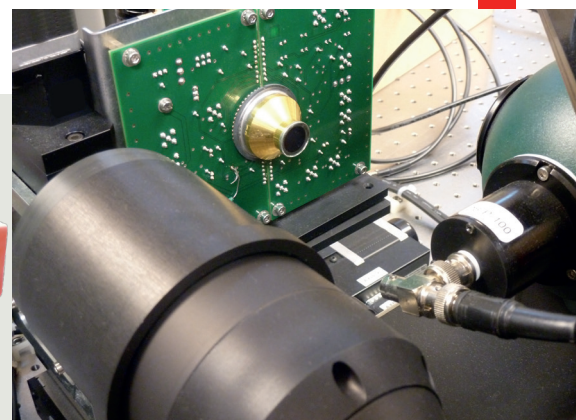


TwIN1000

DOUBLE EXTENDED AREA
BLACKBODY

TwIN1000

ref: TWN-Len-ail



→ IR sensor test equipment

TECHNICAL DATA ➤

	TwIN1000 CF	TwIN1000 CN
Size of the two emissive areas	42 mm x 42 mm	
Emissivity / Apparent emissivity after calibration	0.98 ± 0.02 / 1.00	
Temperature range	+10°C to + 90°C	-5°C to +150°C
Thermal uniformity at ambient/ at 50°C	0.01°C / 0.1°C	
Stability	0.5 mK	
Stabilization time @ 2mK	20 sec	
Slew rate	> 0.5°C/s heating ; > 0.25°C/s cooling	
Display resolution	0.0001°C (actual temperature and setpoint display)	
Temperature measurement accuracy	± 0.03°C	
Operating temperature	Control unit: + 5°C to +45°C - Head: -20°C to +70°C	
Head dimensions (H x W x D)	90 mm x 112 mm x 80 mm	90 mm (without handle) x 105 mm x 55 mm
Head weight	< 1 Kg	
Electronic unit size	2U x 19"	
Electronic unit weight	6.5 kg	
Remote control	Ethernet, RS232 and IEEE488 interface	
Power supply	90/260 VAC, 1ph., 50/60 Hz	
Maximum Power Consumption	600 W	

Above information is subject to change without notice



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