

STEP

Temperature Controlled Power Meter



STEP-Controller Module

KEY FEATURES

- 1 Temperature Controlled Power Measurement**
Each head is composed of a low noise detector, thermistor, TE cooler and heat sink to compensate for any temperature change
- 2 The Ultimate Choice in Measurement Stability**
Temperature control down to 0.05°C from 20 to 30°C gives a temperature coefficient <0.01 %, thus a voltage output stable to 0.01 %
- 3 To be used with the STEP-Controller**
Plug your TP sensor into the STEP-Controller for power supply and temperature control. You can then use the analog output with a scope or lock-in
- 4 2 Sizes Available**
 - TP5-BL: 5 mm Ø pyroelectric sensor with organic black coating
 - TP9-BL: 9 mm Ø pyroelectric sensor with organic black coating

AVAILABLE MODELS

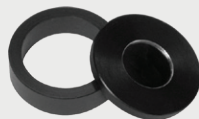


TP5-BL (5 mm Ø-Organic Black) TP9-BL (5 mm Ø-Organic Black)

ACCESSORIES



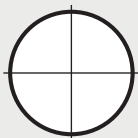
Stand with Steel Post



Removable IR Windows (Various types available)



Fiber Adaptors & Connectors (FC, SC, ST and SMA)



IR Alignment Aide and Crosshairs



SDC-5000 Digital Optical Chopper



Pelican Carrying Case

SEE ALSO

TECHNICAL DRAWINGS
STEP-CONTROLLER

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STEP

SENSOR SPECIFICATIONS



Approved or in the process of being approved*

MODELS	TP5-BL	TP9-BL
MAX AVERAGE POWER	0.5 mW	0.5 mW
EFFECTIVE APERTURE	5 mm Ø	9 mm Ø
TEMPERATURE STABILITY	± 0.05°C	± 0.05°C

MEASUREMENT CAPABILITY	With STEP-Controller and Scope	With STEP-Controller and Lock-In	With STEP-Controller and Scope	With STEP-Controller and Lock-In
	Spectral Range	0.25 - 15 µm		0.25 - 15 µm
Temperature Stability ^a	± 0.05°C		± 0.05°C	
Voltage Response Stability ^a	± 0.01%		± 0.01%	
Max Measurable Power	0.5 mW		0.5 mW	
Noise Equivalent Power ^b	< 5 nW	< 11 nW	< 5 nW	< 11 nW
Rise Time	≤ 0.2s		≤ 0.2s	
Sensitivity (630nm, 5 Hz)	20 kV/W (Peak)	9 kV/W (RMS)	20 kV/W (Peak)	9 kV/W (RMS)
Calibration Uncertainty	± 2.5%		± 2.5%	
DAMAGE THRESHOLDS				
Maximum Average Power Density (1064 nm)	50 mW/cm ²		50 mW/cm ²	
PHYSICAL CHARACTERISTICS				
Effective Aperture	5 mm Ø		9 mm Ø	
Sensor	Pyroelectric		Pyroelectric	
Absorber	BL		BL	
Dimensions	50.8Ø X 48.3D mm		50.8Ø X 48.3D mm	
Weight	227 g		227 g	
ORDERING INFORMATION				
Full Product Name	TP5-BL		TP9-BL	
Product Number	201742		201743	

a : From 20 to 30 °C.
b : (with bandwidth 1 Hz)

Specifications are subject to change without notice

STEP-CONTROLLER SPECIFICATIONS

STEP-Controller
(Front View)STEP-Controller
(Rear View)

Power Module
On/Off Switch
Cooler Drive On/Off Switch
Thermistor Indicators
Detector Input
Detector Analog Output

STEP-Controller

9VDC
Power On Light
Power On Light
OPEN & SHORT Lights
Lemo Connector
BNC Connector

* For details, contact your Gentec-EO representative