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Data Sheet

August 13, 2026

ADVANTEST

Advantest TQ8215 Optical Power Multimeter

Advantest TQ8215 Optical Power Multimeter The Advantest TQ8215 is a benchtop optical power multimeter that combines optical power measurement with DC voltage, DC current, resistance, and thermocouple temperature functions. It supports peak power and demodulation monitor modes, direct measurements to 50 mW, analog tracking output, and interchangeable TQ82000 series optical sensors for 400 nm to 1.65 μ m coverage depending on sensor. Laser diode and fiber component power test to 50 mW; peak power and modulation monitor measurements; production line optical and electrical multiparameter logging; GPIB automated optical power systems with TQ13216 adapter. The Advantest TQ8215 is a benchtop optical power multimeter that combines optical power measurement with DC voltage, DC current, resistance, and thermocouple temperature functions. It supports peak power and demodulation monitor modes, direct measurements to 50 mW, analog tracking output, and interchangeable TQ82000 series optical sensors for 400 nm to 1.65 μ m coverage depending on sensor. Laser diode and fiber component power test to 50 mW; peak power and modulation monitor measurements; production line optical and electrical multiparameter logging; GPIB automated optical power systems with TQ13216 adapter.



MODEL

Advantest TQ8215

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TQ8215

LISTING

<https://aumictechlabs.com/products/tq8215-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest TQ8215 Optical Power Multimeter is a benchtop instrument that combines optical power measurement with multifunction electrical testing capabilities. It delivers accurate fiber optic system characterization through integrated optical sensors, autoranging measurement, and real-time data analysis functions. The unit supports research, production, and system integration environments with both AC mains and battery operation.

Technical Specifications

Optical Measurements Wavelength range: 0.8 to 1.6 μm Wavelength display resolution: 0.01 nm Direct measurement capability: Up to 50 mW (laser diode measurement without attenuator) Power types measured: Average power, peak power Absolute accuracy: ± 20 dBm (± 0.25 dB at 1310 nm)

Electrical Measurements DC voltage measurement DC current measurement Resistance measurement Temperature measurement A/D converter accuracy: $\pm 0.1\%$ (including sensor measurement accuracy) Display & Sampling 4½-digit display with wide dynamic range Sampling rate: 10 samples per second Autoranging with manual operation available

Functional Capabilities Measurement hold and manual triggering Scaling, percentage deviation, averaging, and max/min value display Smoothing function for measurement stability Demodulation functions enabling waveform monitoring via oscilloscope Analog monitor function Wavelength sensitivity compensation with automatic internal calibration (CFnm mode) Excellent linearity and temperature stability

Power Supply AC 100V mains operation (Japanese specification) Optional battery operation: Internal Ni-Cd battery pack with ≥ 10 hours continuous run time; rechargeable via AC adapter

Key Features Compatible sensors: Silicon photodiodes (short wavelength), germanium or InGaS photodiodes (long wavelength); includes Q82014A, Q82017A (thin optical sensor), and Q82021A Optional GPIB interface for system integration Portable battery-powered outdoor operation capability

Typical Applications Research and development, production line testing, optical system integration, laser diode characterization.

TQ8215 Characteristics / Specifications

PARAMETER	VALUE
Model	TQ8215
Manufacturer	Advantest
Instrument Type	Optical Power Multimeter
Alias	TQ8215; Advantest TQ8215
Optical direct power maximum	50 mW (sensor dependent)
A/D converter absolute accuracy	plus/minus 0.1 percent (included in sensor accuracy)
Optical measurement speed FAST	9 to 12 times per second
DCV temperature speed FAST	10 to 12 times per second
Resistance speed FAST	5 to 6 times per second
SLOW speed ratios	1/2; 1/5; 1/10; 1/20; 1/50; 1/100 of FAST
DC voltage range maximum	199.99 V
DC voltage resolution minimum	1 uV (19.999 mV range)
DC voltage accuracy class	plus/minus 0.06 percent of reading plus digits (6 months)
DC current range	200 mA
DC current resolution	10 uA
DC current accuracy	plus/minus 0.6 percent of reading plus 3 digits
Resistance range maximum	1999.9 kohm
Thermocouple types	T; J; E; K; S; R; B (JIS C1602-1981 calibration)
Temperature resolution	0.1 C
Internal reference junction accuracy	plus/minus 1.6 C adder
Analog output range	0 to 0.999 V (3 digits)
Analog output connector	BNC floating
Range switching	automatic or manual optical 10 dB steps
Operating temperature	0 C to 40 C; 85 percent RH max
Power consumption	13 VA max with TQ82010 sensor block

PARAMETER	VALUE
Dimensions	approx 240 mmWx 88 mmHx 310 mmDMass: 3.7 kg maximum
Mains standard	100 VAC 50/60 Hz (options 32/42/44)
Sensor compatibility	TQ82010; TQ82011; Q82014A; Q82017A; Q82018A; Q82021A; Q82024
GPIO option	TQ13216 IEEE 488 adaptor
Peak monitor bandwidth example Q82021A	DC to 30 MHz plus/minus 1 dB opt Notes Specs from Advantest TQ8215-11E datasheet and TQ82000 sensor tables. Confirm installed sensor, GPIO adaptor, and mains option on the unit.
Bandwidth	example Q82021A: DC to 30 MHz plus/minus 1 dB opt

General Specifications & Supplementary Characteristics

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GPIB option	TQ13216 IEEE 488 adaptor
Peak monitor bandwidth example Q82021A	DC to 30 MHz plus/minus 1 dB opt Notes Specs from Advantest TQ8215-11E datasheet and TQ82000 sensor tables. Confirm installed sensor, GPIB adaptor, and mains option on the unit.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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GPiB option	TQ13216 IEEE 488 adaptor
Peak monitor bandwidth example Q82021A	DC to 30 MHz plus/minus 1 dB opt

Notes
Specs from Advantest TQ8215-11E datasheet and TQ82000 sensor tables. Confirm installed sensor, GPiB adaptor, and mains option on the unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.