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Data Sheet

August 2, 2026

ADVANTEST

Advantest TQ8210 Optical Power Meter

The TQ8210 provides a portable handheld optical power meter that pairs with Advantest silicon, germanium, or InGaAs sensor heads to measure absolute optical power from approximately 400 to 1650 nm depending on the connected sensor, with automatic wavelength sensitivity compensation. Optical telecommunications R&D and maintenance; laser printer, CD, and magneto-optical disk optical power checks; short- and long-wavelength absolute power measurement with interchangeable TQ82000-series sensors; battery-powered field and bench power metering. Resolution: 0.005–0.1% (W); 0.01 dB (dBm) Measurement Rate: 2 measurements/s or faster Attach a compatible Advantest sensor and set wavelength for compensation before absolute readings. Zero/offset the sensor as required. Observe each sensor's power and wavelength limits. TQ8210 is the meter mainframe—optical range is determined by the attached sensor (e.g., TQ82017 short- λ vs TQ82015 long- λ). Alias TQ8210.



MODEL

Advantest TQ8210

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

TQ8210

LISTING

<https://aumictechlabs.com/products/tq8210-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest TQ8210 is a portable, handheld optical power meter for optical communications, laser printer maintenance, CD player diagnostics, and opto-magnetic disk R&D. It delivers 0.005% to 0.1% resolution in watts and 0.01% resolution in dBm, with $\pm 0.2\%$ absolute A/D converter accuracy including sensor measurement error. The instrument features automatic wavelength sensitivity compensation, dual display modes (linear watts and logarithmic dBm), auto or manual

range switching, and measurement speeds of 2 measurements/s or faster. Technical Specifications Resolution: 0.005% to 0.1% (W), 0.01% (dBm) Absolute Accuracy: $\pm 0.2\%$ (A/D converter, includes sensor accuracy) Display: 4-digit wavelength (nm), 4.5-digit power readout (mW, μ W, nW, dBm, dBr) on backlit LCD Range Switching: Automatic or manual selection Measurement Speed: 2 measurements/s or faster Analog Output: 0 V to 2 V, maximum impedance 10 ohm, 2-pin mini-jack connector Operating Temperature: 0°C to 40°C Operating Humidity: 85% RH or less Dimensions: 80 × 180 × 35 mm Mass: 400 g maximum Battery: Internal rechargeable Ni-Cd (8+ hours with backlight, 10+ hours without) Key Features Wavelength sensitivity compensation automatically adjusts for sensor drift across range changes Max-hold function captures peak measurements during transient monitoring dBr mode enables relative power measurement against stored reference levels Digital smoothing with 2-to-20-point moving averages reduces noise in unstable optical sources Sensor offset storage and automatic compensation eliminate manual zeroing between measurements AC adapter options: 90–110 V, 103–132 V, or 200–245 V AC configurations Typical Applications Optical communications system alignment and troubleshooting Laser printer power verification during maintenance CD player optical path diagnostics Opto-magnetic disk development and characterization Compatibility & Integration The TQ8210 pairs with Advantest interchangeable optical sensors covering 0.4 μ m to 1.65 μ m: Q82014A: 0.4–1.1 μ m (short wavelength) Q82015: 0.8–1.6 μ m (long wavelength) Q82017A: 0.4–1.1 μ m (short wavelength, thin-type) Q82018A: 0.8–1.65 μ m (long wavelength) Connector adapters support FC, D4, OF2, and SMA types.

Features & description

From manufacturer datasheet

Features

- Portable optical power meter mainframe
- Works with Si (short- λ) and Ge/InGaAs (long- λ) sensors
- Wavelength sensitivity compensation for absolute power
- 4½-digit power readout; 4-digit wavelength readout
- Resolution 0.005–0.1% (W); 0.01 dB (dBm)
- A/D absolute accuracy $\pm 0.2\%$
- Auto/manual ranging; ≥ 2 measurements/s
- MAX Hold, dBr relative, smoothing (2–20 averages)
- Backlit LCD; analog output 0–2 V
- Ni-Cd battery pack (≥ 10 hours class) plus AC operation

TQ8210 Characteristics / Specifications

PARAMETER	VALUE
Model	TQ8210
Manufacturer	Advantest
Instrument Type	Handheld Optical Power Meter
Sensor Compatibility	Q82014A / TQ82017 (0.4–1.1 μm); TQ82015 / Q82018A (long-wavelength class); other TQ82000 sensors
Display	LCD with backlight
Power Readout	4.5 digits (mW, μW , nW, dBm, dBr)
Wavelength Readout	4 digits (nm)
Resolution	0.005–0.1% (W); 0.01 dB (dBm)
A/D Accuracy	$\pm 0.2\%$
Measurement Rate	2 measurements/s or faster
Analog Output	0 to 2 V
Alias	TQ8210 Standard Operating Conditions Attachacompatible Advantest sensor and set wavelength for compensation before absolute readings. Zero/offset the sensor as required. Observe each sensor's power and wavelength limits.
TQ8210 is the meter mainframe	optical range is determined by the attached sensor (e.g., TQ82017 short- λ vs TQ82015 long- λ). Alias TQ8210.

TQ8210 Specifications

PARAMETER	VALUE
Advantest TQ8210 Optical Power Meter	Overview
Technical Specifications	Model: TQ8210
Operational Notes	TQ8210 is the meter mainframe—optical range is determined by the attached sensor (e.g., TQ82017 short-λ vs TQ82015 long-λ). Alias TQ8210.

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	
Specifications	
PARAMETER	VALUE
Model	TQ8210
Manufacturer	Advantest
Instrument Type	Handheld Optical Power Meter
Sensor Compatibility	Q82014A / TQ82017 (0.4–1.1 μm); TQ82015 / Q82018A (long-wavelength class); other TQ82000 sensors
Display	LCD with backlight
Power Readout	4.5 digits (mW, μW, nW, dBm, dBμ)
Wavelength Readout	4 digits (nm)
Resolution	0.005–0.1% (W); 0.01 dB (dBm)
A/D Accuracy	±0.2%
Measurement Rate	2 measurements/s or faster
Analog Output	0 to 2 V
Alias	TQ8210
Standard Operating Conditions	
Attach compatible Advantest sensor and set wavelength for compensation before absolute readings. Zero/offset the sensor as required. Observe each sensor’s power and wavelength limits.	
Operational Notes	
TQ8210 is the meter mainframe—optical range is determined by the attached sensor (e.g., TQ82017 short-λ vs TQ82015 long-λ). Alias TQ8210.	

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.