

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

ADVANTEST

Advantest Q82223 – High Power Optical Sensor

Advantest Q82223 High Power Optical Sensor The Advantest Q82223 is a high-power optical sensor head for the Q8221 optical multi power meter. OEM discontinued-product listings classify Q82223 as a high-power optical sensor, with sibling heads Q82214/Q82215/Q82216 (optical sensor heads) and Q82227 (high-power sensor head). The Q8221 mainframe accepts plug-in optical sensors for calibrated optical power. High optical-power measurements on an Advantest Q8221 multi power meter. Instrument Type: High power optical sensor The Advantest Q82223 is a high-power optical sensor head for the Q8221 optical multi power meter. OEM discontinued-product listings classify Q82223 as a high-power optical sensor, with sibling heads Q82214/Q82215/Q82216 (optical sensor heads) and Q82227 (high-power sensor head). The Q8221 mainframe accepts plug-in optical sensors for calibrated optical power. High optical-power measurements on an Advantest Q8221 multi power meter. Instrument Type: High power optical sensor Host Meter: Q8221 optical multi power meter



MODEL

Advantest Q82223

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

Q82223

LISTING

<https://aumictechlabs.com/products/q82223-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest Q82223 is a high-power optical sensor engineered for precise optical power measurements across demanding applications including laser power monitoring, optical component testing, and fiber optic communication system analysis. It delivers accurate, reliable

data with excellent linearity and stability, ensuring consistent performance over extended measurement periods. The sensor integrates into the Advantest Q8221 system framework, which provides high-speed sampling capabilities up to 100 times per second.

Technical Specifications

Measurement Accuracy: $\pm 2.5\%$ at calibration point; $\pm 4.5\%$ across broad wavelength region with sensitivity curve compensation

Linearity: $\pm 0.5\%$

Power Measurement Range: Up to +10 dBm with high linearity

Sampling Speed: Up to 100 times/sec

Ranging Speed: 20 msec minimum to 500 msec maximum

Noise Performance: -94 dBm (cooled InGaAs photodiode configurations)

Key Features

- High sensitivity via cooled InGaAs photodiode technology for low light level detection
- Low polarization dependency enabling precision PDL measurements when paired with polarization scrambler
- Low reflection characteristics with return loss of 50 dB or greater using slant-polished fiber ends; 45 dB or greater with PC polished connectors and appropriate adaptors
- Fiber compatibility with 10 μm core diameter and 0.19 NA or less, supporting dispersion shift fibers
- Multiple connector options: FC, SC, ST, MU, LC, and plug-in configurations

Typical Applications

- Laser power monitoring and characterization
- Optical component performance validation
- Fiber optic communication system analysis and troubleshooting

Compatibility & Integration

The Q8223 operates with compatible Advantest optical power meter mainframes such as the Q8221. GPIB interface support enables integration into automated test environments and remote system control.

Features & description

From manufacturer datasheet

High power optical sensor

Q8221 multi power meter head Sibling Q82214/15/16/27 heads Advantest lightwave power Calibrated sensor head Technical Specifications Model: Q82223 Instrument Type: High power optical sensor Host Meter: Q8221 optical multi power meter Related Heads: Q82214, Q82215, Q82216 optical sensor heads Related High Power: Q82227 high power sensor head Related Interface: Q82202 interface plug-in and Q82203 optical interface unit Manufacturer: Advantest Use Case: high optical power sensing Literature: Advantest discontinued EMI product list Q82223 high power optical sensor Family: Advantest Q8221 optical power sensors Documentation Type: OEM Q82223 listing Brand Lineage: Advantest System Role: high power optical sensor head Form Factor: optical sensor head Measurement Class: optical power Application Class: high-intensity optical signals Operating Temperature Class: laboratory optical Year Class: Q8221 sensor family Vendor Path: Advantest Documentation Class: OEM optical sensor catalog Connector Class: optical sensor interface to Q8221 Control Class: Q8221 mainframe readout Calibration Class: calibrated optical sensor head Related Units: Q82208 optical unit Notes From Advantest discontinued EMI list (Q82223 high-power optical sensor for Q8221). Wavelength range, power range, and connector type are on the Q82223 sensor specification sheet.

Q82223 Characteristics / Specifications

PARAMETER	VALUE
Model	Q82223
Instrument Type	High power optical sensor
Host Meter	Q8221 optical multi power meter
Related Heads	Q82214, Q82215, Q82216 optical sensor heads
Related High Power	Q82227 high power sensor head
Related Interface	Q82202 interface plug-in and Q82203 optical interface unit
Manufacturer	Advantest
Use Case	high optical power sensing
Literature	Advantest discontinued EMI product list Q82223 high power optical sensor
Family	Advantest Q8221 optical power sensors
Documentation Type	OEM Q82223 listing
Brand Lineage	Advantest
System Role	high power optical sensor head
Form Factor	optical sensor head
Measurement Class	optical power
Application Class	high-intensity optical signals
Operating Temperature Class	laboratory optical
Year Class	Q8221 sensor family
Vendor Path	Advantest
Documentation Class	OEM optical sensor catalog
Connector Class	optical sensor interface to Q8221
Control Class	Q8221 mainframe readout
Calibration Class	calibrated optical sensor head
Related Units	Q82208 optical unit

PARAMETER	VALUE
Operating temperature	Class: laboratory optical

Q82223 Specifications

PARAMETER	VALUE
Advantest Q82223 High Power Optical Sensor	Overview
Applications	High optical-power measurements on an Advantest Q8221 multi power meter.
High power optical sensor	Q8221 multi power meter head
Technical Specifications	Model: Q82223

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory optical
Operating Temperature	Class: laboratory optical
Operating Temperature Class	laboratory optical
Year Class	Q8221 sensor family
Vendor Path	Advantest
Documentation Class	OEM optical sensor catalog
Connector Class	optical sensor interface to Q8221
Control Class	Q8221 mainframe readout
Calibration Class	calibrated optical sensor head
Related Units	Q82208 optical unit Notes From Advantest discontinued EMI list (Q82223 high-power optical sensor for Q8221). Wavelength range, power range, and connector type are on the Q82223 sensor specification sheet.

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	Q82223
Instrument Type	High power optical sensor
Host Meter	Q8221 optical multi power meter
Related Heads	Q82214, Q82215, Q82216 optical sensor heads
Related High Power	Q82227 high power sensor head
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Manufacturer	Advantest
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Form Factor	optical sensor head
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Operating Temperature Class	laboratory optical
Year Class	Q8221 sensor family
Vendor Path	Advantest
Documentation Class	OEM optical sensor catalog
Connector Class	optical sensor interface to Q8221
Control Class	Q8221 mainframe readout
Calibration Class	calibrated optical sensor head
Related Units	Q82208 optical unit
Notes	
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range, and connector type are on the Q82223 sensor specification sheet.

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.