

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Advantest TQ82015* at our website: ***Click HERE***

Technology Support on the Leading Edge

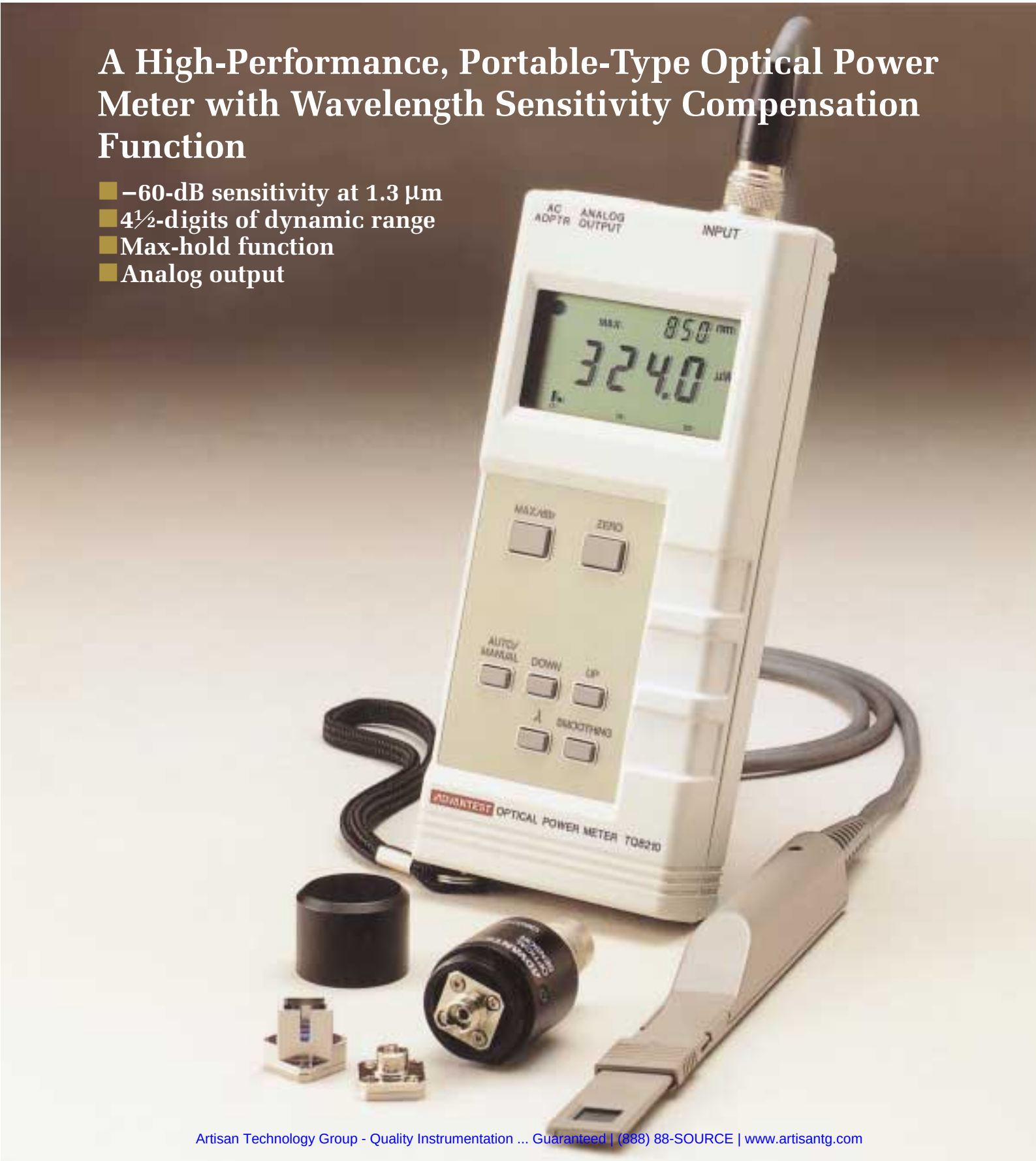
ADVANTEST

ADVANTEST CORPORATION

TQ8210
Optical Power Meter

A High-Performance, Portable-Type Optical Power Meter with Wavelength Sensitivity Compensation Function

- −60-dB sensitivity at 1.3 µm
- 4½-digits of dynamic range
- Max-hold function
- Analog output

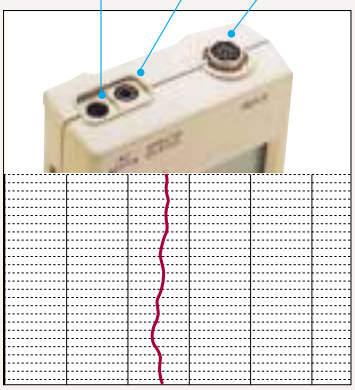


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Ideal for both communications and maintenance

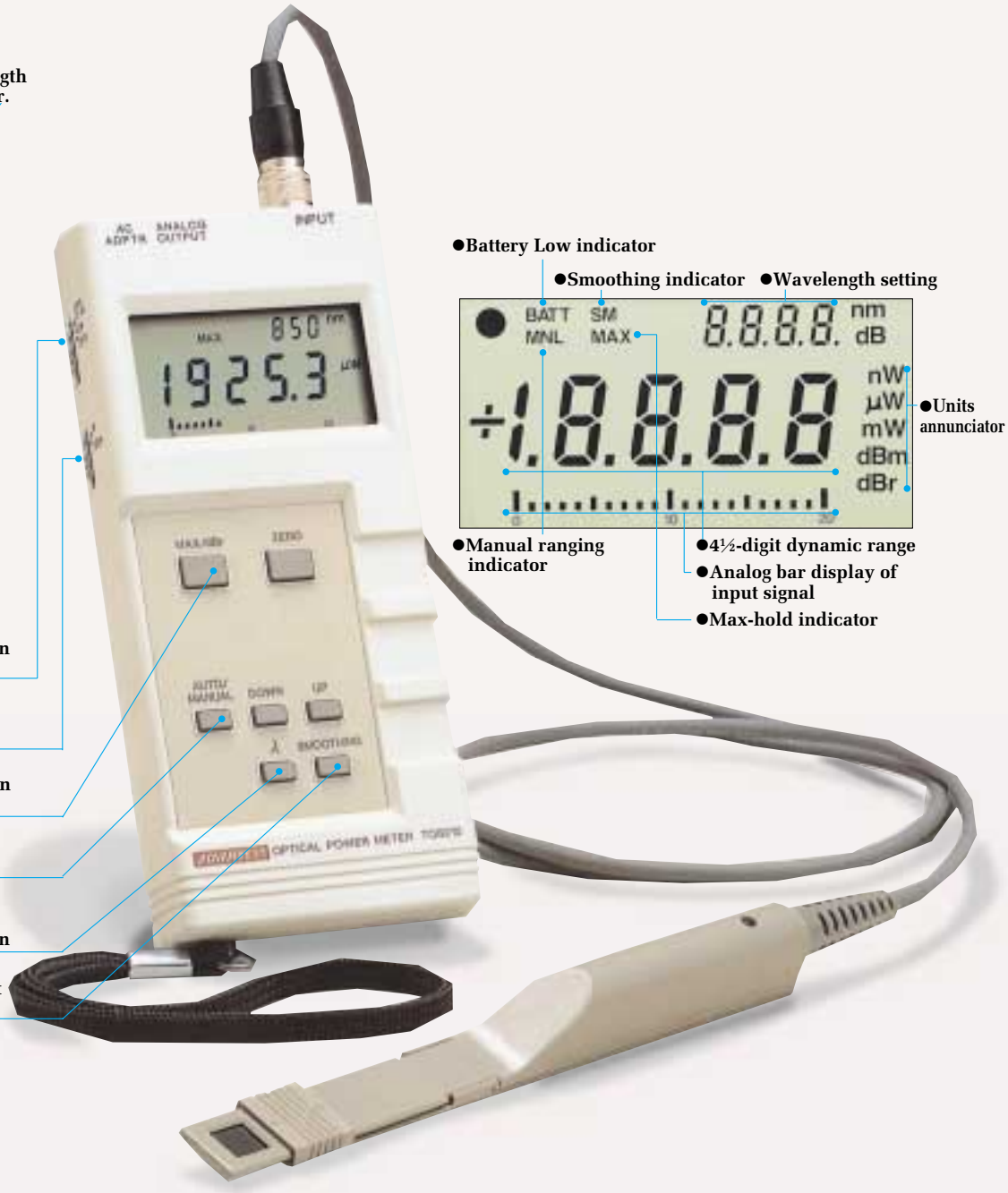
The TQ8210 is a handheld optical power meter which can be combined with ADVANTEST silicon photodiode sensors for use at short wavelengths and an In GaAs or germanium photodiode sensor for use at long wavelengths.
It is designed to handle a wide range of applications, including such diverse uses as optical communications, laser printers, CD players and optomagnetic disk R&D and maintenance. In spite of its small size, the ADVANTEST design team provided the TQ8210 with such features as built-in response compensation, thereby ensuring high accuracy even when measurement range and sensor are changed. And, powered by batteries, the TQ8210 can be taken anywhere for accurate, reliable power measurements.

- Usable with a long-wavelength (TQ82015/Q82018A), short-wavelength (Q82014A) or thin (Q82017A) sensor.
- Analog output of input signal
- AC adaptor enables AC Line powered operation and battery charging.



Example of analog recording of output from the TQ8210

- Backlighting for easy reading even in dark locations.
- Linear display (W) or logarithmic display (dBm)
- Maximum power value hold function and relative (dBr) value display
- Easy-to-use auto-ranging
- Wavelength sensitivity compensation
- Smoothing ensures stable measument results



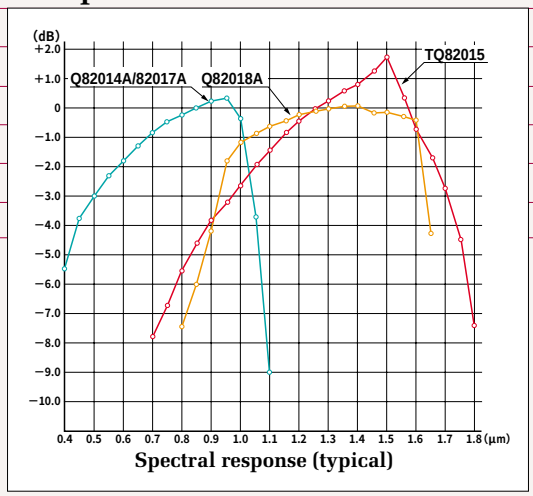
- Battery Low indicator
- Smoothing indicator
- Wavelength setting

- Units annunciator
- Manual ranging indicator
- 4½-digit dynamic range
- Analog bar display of input signal
- Max-hold indicator

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

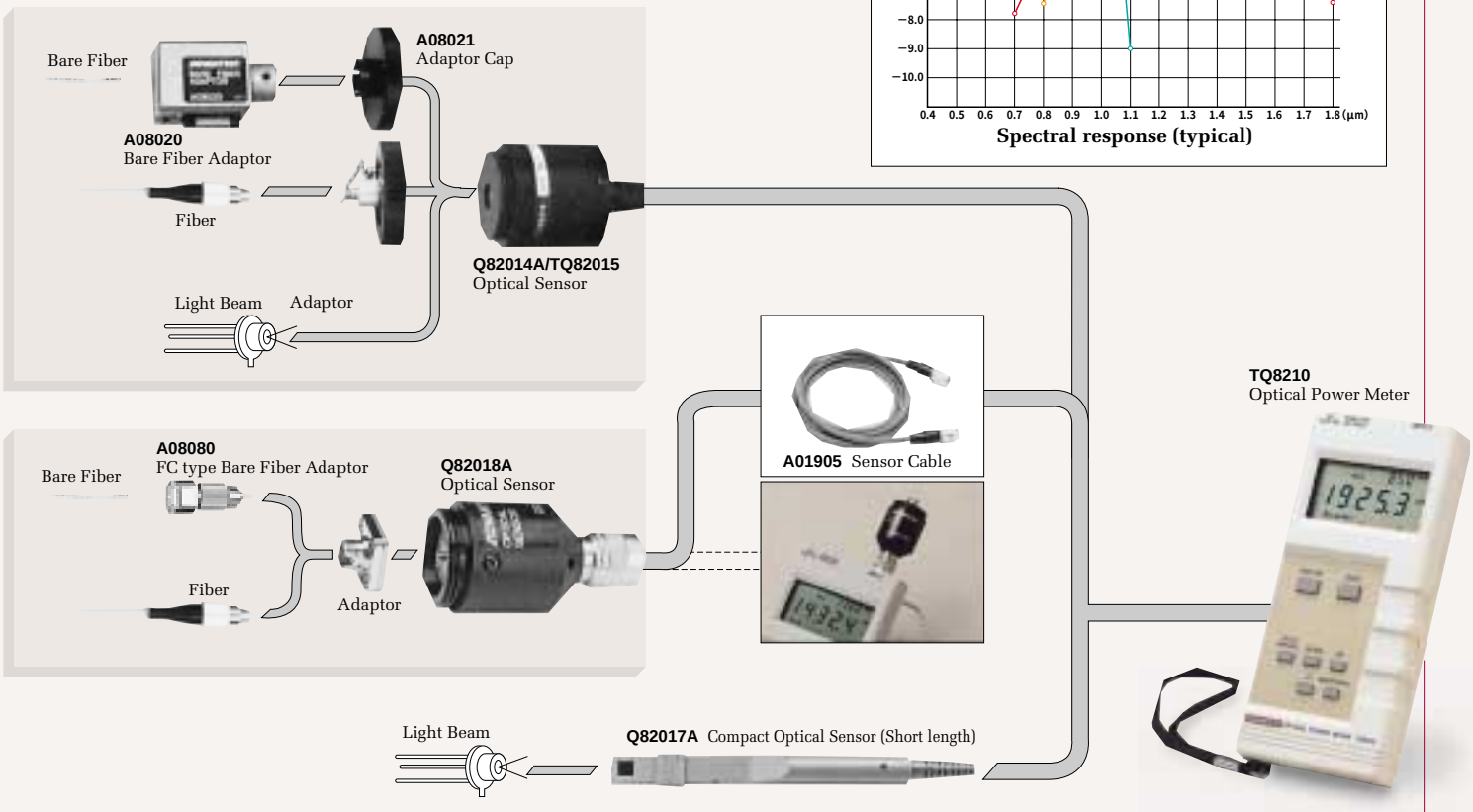
Features

- A wavelength sensitivity compensation function enables absolute power to be measured with high precision.
- High-sensitivity (−60 dB) measurements at 1.3µm (using a Q82018A sensor)
- Wide dynamic range (4-½digits)
- A smoothing function facilitates measurement in noisy environments or unstable conditions.
- A max-hold function enables masurement of the maximum power value.
- Possible to clean ferrule touch surface.
- The liquid crystal display is backlighted for reading in dark locations.
- Easy-to-use auto-ranging.
- Analog output function.



Spectral response (typical)

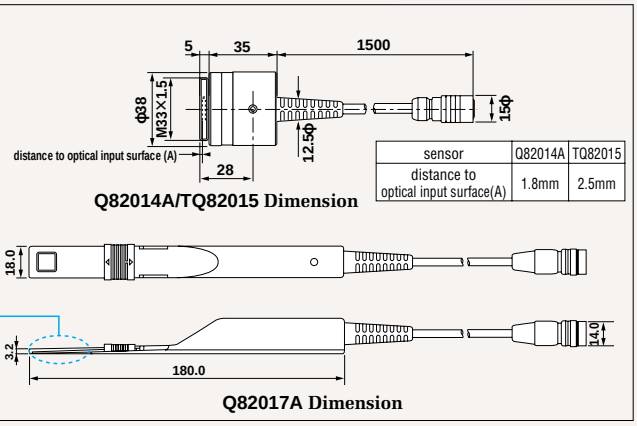
Sample Configurations

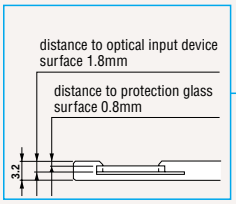


Adaptor Table Corresponds to Connectors

	Q82014A	TQ82015	Q82018A
FC/PC	A08012	A08012	A08081*
SC	A08090	A08090	A08082
ST	A08096	A08096	A08083
Biconical	A08025	A08025	—
D4	A08013	A08013	—
DIN	A08029	A08029	—
SMAφ2.5	A08095	A08095	—
SMAφ3.175	A08028	A08028	—

*Standard accessaries





Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Specifications

Mainframe Specifications

Resolution: 0.005% to 0.1% (with unit of W)
0.01% (with unit of dBm)
Absolute Accuracy of A/D converter: ±0.2% (included sensor measurement accuracy)
Display: LCD with back light for use in dark location
Wavelength readout 4 digits(nm)
Power readout 4-½ digits (mW, μW, nW, dBm, dBr)
Range switching: Automatic or manual
Measurement speed: 2 Measurements/s or faster
Max-Hold and dBr Functions:
Max-hold (for wait measurement) The maximum measured value is held
dBr (for dBr measurement) The value relative to a reference value is indicated.
Wavelength sensitivity compensation: Automatic compensation of sensor sensitivity at set wavelengths.
Smoothing function: Digital smoothing (by moving averages, 2 to 20 averages)
Offset and zero: Stores sensor offset for automatic compensation.
Analog output: Proportional to the input signal
Output voltage: 0V to 2V Output impedance: Max 10Ω
Output connector: 2-pin mini-jack

Optical Sensors Specifications (Option)

Model	Q82014A optical sensor (for short wavelengths)	TQ82015 optical sensor (for Long wavelengths)	Q82017A thin-type optical sensor	Q82018A (for long wavelengths)
Wavelength range	0.4 to 1.1μm	0.8 to 1.6 μm	0.4 to 1.1 μm	0.8 to 1.65μm
Power range *2	−60 to +17 dBm (1 nW to 50 mW)	−40 to +10 dBm (100 nW to 10 mW)	−60 to +17 dBm (1 nW to 50 mW)	−60 to 0 dBm (1 nW to 1 mW)
Sensor element	Si	Ge	Si	InGaAs PIN
Light input format	Direct			FC*1
Photoreceptive area	Approx. 8 mmΦ	Approx. 5 mmΦ	Approx. 10 x 10 mm□	—
Measurement range	8 ranges in 10 dB steps	5 ranges in 10 dB steps	8 ranges in 10 dB steps	6 ranges in 10 dB steps
Measurement accuracy	±5% (at 850nm, −20 dBm input)	±5% (at 1300 nm, −20 dBm input)	±5% (at 850 nm, −20 dBm input)	±5% (at 1300 nm, −20 dBm input)
Wavelength sensitivity compensation range	0.4 to 1.1μm	0.8 to 1.7 μm	0.4 to 1.1μm	0.75 to 1.7μm

*1 For other connector types, contact ADVANTEST's sales office or sales representatives.
*2 Measured with each wavelength range. The maximum level is measured when the light is received on the entire photoreceptive area of the sensor.

General Specifications

Operating conditions: 0°C to 40°C, 85% RH or less
Power: Internal NiCd battery (more than 8 hours when LCD backlight is ON, More than 10 hours when LCD backlight is OFF.)
Change of AC power requirement:
Specified at the time of ordering (The Ni-Cd battery can be changed)

Option No.	Standard	42
Supply voltage (V)	90 to 110(A08017)	200 to 245(A08019)

Power Consumption

Option No.	Standard	32	42*
Supply voltage(V)	90 to 110(A08017)	103 to 132(A08035)	200 to 245(A08019)
Power consumption	5VA or less	5VA or less	6.4VA or less

*Option 42 receives CE Mark Approval.

Dimensions: Approx. 80 (W) × 180 (L) × 35 (H) mm
Mass: 400g maximum
Standard Accessories: AC adaptors A08017 (90 to 110V AC) or A08035 (103 to 132V AC) or A08019 (200 to 245V AC) specified at time of ordering
Analog output cable: A01225

Accessories

Adaptors (Optional accessories)
FC Adaptor A08012
D4 Adaptor A08013
OF2 Adaptor A08014
Bare-fiber Adaptor (FC type) A08024
Bare-fiber Adaptor (V groove) A08020
Adaptor Cap A08021
Dummy Fiber TQ11831
ATT Biconical A08025
Diamond 2.5/3.5 A08026/27
Amphenol SMA A08028
Siemens A08029
Sumitomo Mini-BNC A08030
MBO A08031
HFBR-4000 A08032



A08017/A08019/A08035
AC adaptor

Technology Support on the Leading Edge
ADVANTEST®
Your Local Representative
ADVANTEST CORPORATION
Shinjuku-NS Building, 4-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0880, Japan
Phone : (03)3342-7500 Facsimile : (03)5322-7270 Telex : 232-4914 ADVAN J
Advantest (Singapore) Pte. Ltd. :438A Alexandra Road, #08-03/06 Alexandra Technopark Singapore 119967 Phone : +65-274-3100
Tektronix Inc.: (North America) Phone : +1-800-426-2200
Rohde & Schwarz Engineering and Sales GmbH: (Europe) Phone : +49-89-4129-3711
Homepage http://www.advantest.co.jp

Data subject to change without notice. © Copyright 1997 ADVANTEST CORPORATION

Printed in Japan. Bulletin No.TQ8210-5315E Sep. '01D.

We use recycled paper for the environmental protection.
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP