

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.

Visit our website - *Click HERE*

Technical Specifications (continued)

High power sensor module	81630B
Sensor element	InGaAs
Wavelength range	970 nm to 1650 nm
Power range	–70 dBm to +28 dBm
Applicable fiber type	Standard SM and MM up to 100 µm core size, NA ≤0.3
Uncertainty (accuracy) at reference conditions [1]	±3.0% for 1255 nm to 1630 nm at 980 nm ±3.5% (add ±0.5% per nm if 980 nm is not the center wavelength) at 1060 nm ±4.0% (add ±0.6% per nm if 1060 nm is not the center wavelength),
Total uncertainty [2,8]	±5% ±1.2 nW (1255 nm to 1630 nm) at 980 nm ±5.5% ±1.2 nW (add ±0.5% per nm if 980 nm is not the center wavelength) at 1060 nm ±6.0% ±1.2 nW (add ±0.6% per nm if 1060 nm is not the center wavelength)
Relative uncertainty:	
- due to polarization [3]	< ±0.01 dB
- spectral ripple (due to interference) [4]	< ±0.005 dB
Linearity (power): [5]	CW – 50 dBm to + 28 dBm (970 nm – 1630 nm)
- at 23 °C ± 5 °C	≤±0.05 dB [8]
- at operating temp. range	≤±0.15 dB [8]
Return loss [7]	> 55 dB
Noise (peak to peak) [6]	< 1.2 nW (1255 nm – 1630 nm)
Averaging time (minimal)	100 µs
Maximum safe input power	+28.5 dBm
Analog Output	Included
Dimensions (H x W x D)	75 mm x 32 mm x 335 mm (2.8" x 1.3" x 13.2")
Weight	0.6 kg
Recommended recalibration period	2 years
Operating temperature	0 °C to +35 °C [9]
Humidity	Non-condensing
Warm-up time	20 min

1. Reference Conditions:
   - Power level 80 µW, continuous wave (CW)
   - SM Fiber; 9 µm; NA = 0.1
   - Ambient temperature 23 °C ±5 °C
   - On day of calibration (add ±0.3% for aging over one year, add ±0.6% over two years)
   - Spectral width of source < 10 nm (FWHM)
   - Wavelength setting at power sensor must correspond to source wavelength ≤ ±0.4 nm
2. Operating Conditions:
   - Fiber ≤50 µm, NA ≤0.2
   - Connectors with 2.5 mm ferrule with flat face (fiber tip offset not more than 0.3 mm from 2.5 mm cross-section) with straight or angled polish
   - Averaging time 1 s
   - Within one year after calibration; add 0.3% for second year
   - Operating temperature range as specified, humidity: non-condensing
3. All states of polarization at constant wavelength (1550 nm ±30 nm) and constant power, straight connector, T = 23 °C ±5 °C. For angled connector (8 °) add ±0.01 dB typ.
4. Conditions:
   - Wavelength 1550 nm ±30 nm, fixed state of polarization, constant power
   - Temperature 23 °C ±5 °C
   - Linewidth of source ≥ 100 MHz
   - Angled connector 8 °
5. Does not include noise
6. Averaging time 1 s, T = 23 °C ±5 °C, ΔT ±1 °C, observation time 300 s.
7. Conditions:
   - Wavelengths 1310 nm ±30 nm and 1550 nm ±30 nm
   - Standard single mode fiber
   - Angled connector min 8 °
   - T = 23 °C ±5 °C
8. For input power > +10 mW add: typ. ±0.0012 dB/mW. In case of negative power change > 50 dB allow additional recovery time of 3 min
9. 30 °C for > +20 dBm input power

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