

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 *Newport 2832-C* at our website: ***Click HERE***

## Model 2832-C

# Dual-Channel Optical Power Meter



For optical measurements that require two channels, high-precision, and fast data acquisition, the **2832-C** is the ideal choice. This is ideal for production testing of fiber optic components.

**Single- and dual-channel operations** are supported, with channels displayed individually or simultaneously in dual-channel operation.

The power sensitivity ranges from 100 fW–2W over a wavelength range of 0.19–1.8 µm. The unit is compatible with Newport's **818 Series** silicon, germanium, and indium gallium arsenide detectors, and a wide variety of accessories for measuring bare or connectorized fiber or free space light sources.

Measurements can be made in W, A, dBm, dB or relative units. These may be displayed directly or as relative ratio measurements from present or stored values.

Moving statistical measurements permit you to compute moving statistics for 1 to 100 measurements with Min, Max, Max-Min, Mean, and Standard Deviation. You may also select from many programming features such as sampling frequency and precision,digital and analog filtering, and data storage of up to 1000 readings per channel.

### Additional Benefits

- Includes both RS-232C and IEEE-488 interfaces
- Six-digit vacuum fluorescent display is legible from any angle and in any light condition
- Stores and recalls up to 10 operating configurations for setup convenience
- System calibration is user-adjustable, with wavelength settings in 1 nm increments
- Provides trigger in/out control with alarm levels and adjustable trigger polarity

### Key Features

- *Fast* IEEE-488 (GPIB) *end-to-end data transfer rate*, 50–100 Hz, *depending on software interface*
- *Data acquisition rate of* 1000/500 *samples per second, in single/dual channel operation*
- *Advanced features include* 1000 *point data storage, statistical measurements, and triggers with reconfigurable alarms*
- *Instrument can be integrated in the most sophisticated automated systems in production and laboratory applications*




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

## Instrument Specifications

| | |
|---|---|
| Display | 6-digit vacuum fluorescent |
| Sampling Resolution | 20,000 count ≤25 Hz, 4096 count ≤1 kHz |
| Gain Ranges | Up to 7 decades |
| Current Sensitivity (full-scale) | 2.5 nA–2.5 mA |
| Resolution | 100 fA |
| Sampling Rate | Up to 1 kHz single-channel, Up to 500 Hz dual-channel |
| Bandwidth (-3 dB) | DC to 47 kHz[1] |
| Analog Output | 0–2.5 V into 50Ω |
| DC Accuracy | <±0.1% typical |
| Power Requirements | 90 to 240 VAC |
| Weight [lb (kg)] | 2.5 (1.1) |
| Dimension (W x H x D) [in. (mm)] | 8.5 (216) x 4 (102) x 14 (356) |
| Operating Environment | 10°C to 40°C, <80% RH |
| Storage Environment | -25°C to 60°C, <90% RH |

1) Gain and detector dependent

*For more details on Newport's low-power detectors and fiber optic attachments compatible with the 2832-C, please see page 141 thru 152.*

## System Specifications

The 2832-C is compatible with Newport's Ge, Si and InGaAs detectors, allowing both free-space and fiber pigtailed measurements in the 190–1800 nm range. When using one of these detectors with the 2832-C a calibration module needs to be attached to the detector, assuring the correct reading at any pre-selected wavelength.

| Model | 818-UV/CM | 818-SL/CM | 818-F-SL | 818-ST/CM | 818-IR/CM 818-F-IR | 818-IG/CM | 818-IS-1 |
|---|---|---|---|---|---|---|---|
| Material | Silicon | Silicon | Silicon | Silicon | Germanium | Indium Gallium Arsenide | InGaAs/Si |
| Diameter (cm) | 1.13 | 1.13 | 0.3 | 1 x 1 | 0.3 | 0.3 | |
| Wavelength (nm) | 190–1100 | 400–1100 | 400–1100 | 400–1100 | 780–1800 | 800–1650 | 400–1650 |
| Power Range (dBm) | -83 to +23 | -90 to +33 | -90 to +3 | -70 to +33 | -70 to +21.5[2] | -90 to +21.5 | -70 to +23 |
| Accuracy[1] | ±2% | ±2% | ±2% | ±2% | ±3% | ±2% | ±2.5% |
| Applicable wavelength range (nm) | 200–1100 | 400–1100 | 400–1100 | 400–1100 | 780–1700 | 800–1650 | 400–1650 |
| Linearity | | | | ±0.5% | | | |
| NEP @ 5 Hz and 1 A/W | 50 fW/√Hz | 50 fW/√Hz | 50 fW/√Hz | 3 pW/√Hz | 4 pW/√Hz | 30 fW/√Hz | 3 pW/√Hz[3] |

1) At calibration temperature maintained to ± 0.2°C, -20 dBm level having 99% encircled energy on detector with no optical attenuator
2) -70 to +3 dBm for 818-F-IR
3) 0.01 A/W for the 818-IS-1

*Call Newport's Application Sales Engineers to help you select the optical detector that best meets your application requirements.*

## Ordering Information

| Model | Description |
|---|---|
| 2832-C | Dual-Channel Optical Power Meter |
| 2832-C-CAL | 2832-C with test data and certificate |


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