

**Aumictech**

Test &amp; measurement · bought, sold, repaired, calibrated

**Data Sheet**

August 14, 2026

AGILENT / KEYSIGHT

# Agilent/Keysight N7742C Multiport Optical Power Meter

Agilent Keysight N7742C Multiport Optical Power Meter The Agilent/Keysight N7742C is a multiport optical power meter in the N77-C generation for parallel optical power measurements in transceiver and component test. Multiport optical power monitoring and IL setups in manufacturing. Instrument Type: Multiport optical power meter The Agilent/Keysight N7742C is a multiport optical power meter in the N77-C generation for parallel optical power measurements in transceiver and component test. Multiport optical power monitoring and IL setups in manufacturing. Instrument Type: Multiport optical power meter Series Family: Keysight N77-C optical power meters



MODEL

**Agilent / Keysight  
N7742C**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**N7742C**

LISTING

<https://aumictechlabs.com/products/n7742c-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Keysight N7742C is a multiport optical power meter designed for demanding optical testing applications. It has advanced features for precise and stable optical signal measurements, making it suitable for characterization of telecom, datacom, and fiber optic components. Technical Specifications \* Channels: Available with two (options #200, #210) or four power sensor channels (options #400, #410). Wavelength Range: \* Standard: 1250 nm to 1650 nm (options #200, #400). \* Extended: Down to 800 nm with options #210 and #410. Power Range: \* N7742C: -60 dBm to +10

dBm. \* Alternative specification: -80 dBm to +10 dBm. Maximum Safe Input Power: +16 dBm. Dynamic Range: Over 90 dB. Dark Noise Level: Less than 30 pW. Averaging Time: Short minimum averaging time of 1  $\mu$ s. Bandwidth: Up to 250 kHz. Data Acquisition Rate: Up to 1 Million samples per second and per port. Data Logging Memory: 1 M samples/port plus 1 M/port buffer for continuous logging. Data Transfer: Up to 3x faster data transfer. Analog Output: \* Provides an analog voltage output configurable to be linearly or logarithmically proportional to the optical power level. \* Ideal for automated alignment applications. \* New logarithmic mode is useful for tracking signal levels over a wide dynamic range. Connector Interfaces: User-exchangeable connector styles including N7742FI (FC), N7742KI (SC), N7742LI (LC), and N7742VI (ST). Interfaces and Connectivity \* Remote Interface: LAN and USB connections. User Interface: Modern, browser-accessible graphical user interface (GUI) accessible via LAN or USB, requiring no software installation. Trigger Concept: Family-wide, common trigger concept. Electrical Connectors: Rear panel trigger BNC connectors, front panel analog output BNC connector. Optical Connections: Optical head adapters, quad-adapter connections, 8100XXI optical module connector interfaces, N7742XL exchangeable connector interface. Physical Characteristics \* Form Factor: One rack unit (1U) high and half rack unit wide. Compatibility \* Software Compatibility: Programming code is compatible with the Keysight Lightwave solution platform. Instrument Integration: Easy to integrate multiple instruments into a single setup with parallel programming over LAN or USB. Synchronization: Compatible with Keysight tunable laser sources for spectral measurements. Operational Features \* Measurement Speed: Fast power range switching and uninterrupted simultaneous measurement and readout. Data Acquisition: High-speed measurement data acquisition for swept-wavelength and transient measurements. Logging: Continuous logging with memory for 1 M samples/port plus 1 M/port buffer. User Interface: Intuitive browser-based GUI for convenient instrument configuration. Zeroing: Stable dark-current zeroing. Why Choose Aumictech for Keysight N7742C? At Aumictech, we specialize in supplying optical test equipment. Whether you need precise multiport power measurements, reliable analog feedback for automated alignment, or high-speed data acquisition for complex optical characterization, our team ensures the Keysight N7742C delivers maximum performance for your application.

# N7742C Characteristics / Specifications

| PARAMETER          | VALUE                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------|
| Instrument Type    | Multiport optical power meter                                                              |
| Series Family      | Keysight N77-C optical power meters                                                        |
| Model              | N7742C                                                                                     |
| Function           | multiport optical power measurement                                                        |
| Platform           | N77 compact half rack class                                                                |
| Remote Interfaces  | LAN USB class                                                                              |
| Application Class  | transceiver multiport test                                                                 |
| Sensors            | InGaAs class optical sensors                                                               |
| Wavelength         | telecom wavelength operation class                                                         |
| Connectors         | interchangeable optical interfaces                                                         |
| Logging            | platform logging memory class                                                              |
| Averaging          | configurable averaging times                                                               |
| Form Factor        | 1U half rack class                                                                         |
| Use Stage          | manufacturing R&D                                                                          |
| Calibration        | OEM optical calibration                                                                    |
| Family Peers       | N7743C N7747C related meters                                                               |
| Predecessor Class  | N774xA multiport meters                                                                    |
| Units              | dBmWTriggering: synchronized multiport capture class                                       |
| SCPI               | remote programming                                                                         |
| GUI                | N77 viewer class software                                                                  |
| Fiber              | SM/MM within sensor NA limits                                                              |
| Environment        | plus 5 C to plus 40 C class typical N77                                                    |
| Line Power         | universal AC class                                                                         |
| Configuration Note | expand exact port count and accuracy tables from N7742C OEM datasheet before denser upload |

# N7742C Specifications

| PARAMETER                                             | VALUE                                          |
|-------------------------------------------------------|------------------------------------------------|
| Agilent Keysight N7742C Multiport Optical Power Meter | Overview                                       |
| Multiport optical power meter                         | N77-C compact platform                         |
| Technical Specifications                              | Instrument Type: Multiport optical power meter |

# 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                                                                                      |
| Instrument Type                                                                                         | Multiport optical power meter                                                              |
| Series Family                                                                                           | Keysight N77-C optical power meters                                                        |
| Model                                                                                                   | N7742C                                                                                     |
| Function                                                                                                | multiport optical power measurement                                                        |
| Platform                                                                                                | N77 compact half rack class                                                                |
| Remote Interfaces                                                                                       | LAN USB class                                                                              |
| Application Class                                                                                       | transceiver multiport test                                                                 |
| Sensors                                                                                                 | InGaAs class optical sensors                                                               |
| Wavelength                                                                                              | telecom wavelength operation class                                                         |
| Connectors                                                                                              | interchangeable optical interfaces                                                         |
| Logging                                                                                                 | platform logging memory class                                                              |
| Averaging                                                                                               | configurable averaging times                                                               |
| Form Factor                                                                                             | 1U half rack class                                                                         |
| Use Stage                                                                                               | manufacturing R&D                                                                          |
| Calibration                                                                                             | OEM optical calibration                                                                    |
| Family Peers                                                                                            | N7743C N7747C related meters                                                               |
| Predecessor Class                                                                                       | N774xA multiport meters                                                                    |
| Units                                                                                                   | dBmWTriggering: synchronized multiport capture class                                       |
| SCPI                                                                                                    | remote programming                                                                         |
| GUI                                                                                                     | N77 viewer class software                                                                  |
| Fiber                                                                                                   | SM/MM within sensor NA limits                                                              |
| Environment                                                                                             | plus 5 C to plus 40 C class typical N77                                                    |
| Line Power                                                                                              | universal AC class                                                                         |
| Configuration Note                                                                                      | expand exact port count and accuracy tables from N7742C OEM datasheet before denser upload |
| Notes                                                                                                   |                                                                                            |
| Identity/platform rows from Keysight N7742C multiport optical power meter product listings. Expand full |                                                                                            |

port/accuracy tables from the OEM datasheet before upload.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341

#### Aumictech

788 S 500 E, Pleasant Grove, UT 84062  
[sales@aumictech.com](mailto:sales@aumictech.com) · +1 (484) 841-9341  
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·  
30-day returns  
NAICS 423690 · 811210 · 541380  
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.