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Data Sheet

August 15, 2026

ADVANTEST

Advantest Q7770 – Optical Network Analyzer

The Advantest Q7770 is an optical network analyzer in Advantest's Q7750/Q7760/Q7761/Q7770 optical-NA family. OEM discontinued-product listings classify Q7770 as an optical network analyzer for DWDM and optical-component vector characterization. Family analyzers provide amplitude and phase (vector) measurements and S-parameter style display formats (rectangular, Smith, polar) used to evaluate optical transmission components. DWDM and optical-component vector (amplitude/phase) characterization. Instrument Type: Optical network analyzer Application Class: DWDM system and optical component characterization Display Class: rectangular, Smith, and polar optical network formats on family analyzers Use Case: optical vector network analysis Literature: Advantest discontinued EMI product list Q7770 optical network analyzer



MODEL

Advantest Q7770

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

Q7770

LISTING

<https://aumictechlabs.com/products/q7770-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest Q7770 Optical Network Analyzer delivers comprehensive vector characterization of optical transmission systems through simultaneous amplitude and phase measurements across multiple channels. Purpose-built for DWDM system evaluation and optical component characterization, this instrument provides the precise vector measurements required to validate signal integrity and performance compliance in high-speed optical networks. Technical Specifications Measurement Capabilities Amplitude and phase analysis across multiple optical

channels Precise vector measurements for signal integrity assessment S-parameter measurements including S11, S21, S12, S22 for 2-port devices; extended support for 3-port and 4-port configurations Parameter conversion to impedance (Z) and admittance (Y) parameters Display & Analysis Formats Rectangular coordinates: amplitude (linear/log), phase, group delay, VSWR, complex number representation (real/imaginary) Smith Chart: marker reading with linear/logarithmic amplitude, phase, complex notation, $R + jX$, and $G + jB$ formats Polar coordinates: amplitude, phase, and complex number display options

Key Features Multi-channel optical analysis enables simultaneous characterization of wavelength-division multiplexed signals without sequential measurement overhead. Vector measurement capability captures both magnitude and phase relationships critical for evaluating modulation fidelity and transmission linearity. Support for impedance and admittance conversion allows direct analysis of component characteristics without post-processing calculations.

Typical Applications Dense Wavelength Division Multiplexing (DWDM) system performance validation Optical component characterization including filters, amplifiers, and modulators Signal integrity assessment in coherent optical communication systems Multi-port optical device evaluation

Compatibility & Integration The analyzer accommodates 2-port, 3-port, and 4-port optical device testing. Parameter conversion functions enable direct impedance and admittance analysis, supporting both traditional network parameter workflows and specialized optical measurement requirements.

Q7770 Characteristics / Specifications

PARAMETER	VALUE
Model	Q7770
Instrument Type	Optical network analyzer
Related Models	Q7750, Q7760, Q7761 optical network analyzers
Measurement Class	optical vector amplitude and phase
Application Class	DWDM system and optical component characterization
Display Class	rectangular, Smith, and polar optical network formats on family analyzers
Manufacturer	Advantest
Use Case	optical vector network analysis
Literature	Advantest discontinued EMI product list Q7770 optical network analyzer
Family	Advantest Q77xx optical network analyzers
Documentation Type	OEM Q7770 listing
Brand Lineage	Advantest
System Role	optical network analyzer
Form Factor	benchtop optical NA
Port Class	multi-port optical device test on family analyzers
Parameter Class	S-parameter style optical vector
Remote Class	GPIB class optical NA remote
Operating Temperature Class	laboratory optical
Year Class	Advantest Q77xx optical NA family
Vendor Path	Advantest
Documentation Class	OEM optical NA catalog
Wavelength Class	DWDM optical component test
Control Class	optical NA firmware
Operating temperature	Class: laboratory optical

Q7770 Specifications

PARAMETER	VALUE
Advantest Q7770 Optical Network Analyzer	Overview
Optical network analyzer	Q7750/Q7760/Q7761/Q7770 family
Technical Specifications	Model: Q7770

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory optical
Operating Temperature	Class: laboratory optical
Operating Temperature Class	laboratory optical
Year Class	Advantest Q77xx optical NA family
Vendor Path	Advantest
Documentation Class	OEM optical NA catalog
Wavelength Class	DWDM optical component test
Control Class	optical NA firmware Notes From Advantest discontinued EMI list (Q7770 optical network analyzer in Q7750/Q7760/Q7761/Q7770 family). Wavelength span, dynamic range, and connector type are on the Q7770 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	
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Wavelength span, dynamic range, and connector type are on the Q7770 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.