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Data Sheet

August 13, 2026

SANTEC

Santec OTF-950 Tunable Filter

The Santec OTF-950 is a bench-top tunable optical filter engineered for precision wavelength selection in optical communication and measurement systems. It delivers independent, simultaneous control of wavelength tuning and passband width across the C-band and extended infrared range. The instrument employs free-space optics and precision tuning mechanics to achieve flat-top passband characteristics with excellent optical control. A 40 nm tuning range and wavelength accuracy of ± 0.02 nm enable reliable channel selection and spectral analysis. The OTF-950 interfaces via USB with LabVIEW software support and GPIB for remote operation, accommodating both manual and automated wavelength and bandwidth configuration. Insertion loss of approximately 5 dB with 0.5 dB uniformity, combined with low PDL (≤ 0.25 dB) and PMD (≤ 0.2 ps), ensures minimal signal degradation across polarization states.



MODEL

Santec OTF-950

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

OTF-950

LISTING

<https://aumictechlabs.com/products/otf-950-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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wavelength accuracy of ± 0.02 nm enable reliable channel selection and spectral analysis. The OTF-950 interfaces via USB with LabVIEW software support and GPIB for remote operation, accommodating both manual and automated wavelength and bandwidth configuration. Insertion loss of approximately 5 dB with 0.5 dB uniformity, combined with low PDL (≤ 0.25 dB) and PMD (≤ 0.2 ps), ensures minimal signal degradation across polarization states. Return loss exceeds 45 dB. Though Santec has discontinued manufacturer support, the OTF-950 remains operational for legacy installations and applications requiring flexible optical filtering.

Technical Specifications

Wavelength Range (C-Band): 1525–1565 nm Wavelength Range (Extended): 1530–1610 nm
Wavelength Tuning Range: 40 nm Wavelength Accuracy: ± 0.02 nm Passband Shape: Flat-top
Bandwidth Tuning Range (-3 dB): 0.25 nm to 6.0 nm Bandwidth Tuning Range (-20 dB): 0.25 nm to 6.0 nm
Bandwidth Tuning Range (Notch Type): 0.4 nm to 6.0 nm Insertion Loss: Typically 5 dB
Insertion Loss Uniformity: 0.5 dB Polarization Dependent Loss (PDL): ≤ 0.25 dB Polarization Mode Dispersion (PMD): ≤ 0.2 ps Chromatic Dispersion: -40 to 40 ps/nm Return Loss: ≥ 45 dB
Supply Voltage: AC 100–240 V ($\pm 10\%$) Frequency: 50/60 Hz Dimensions: $343 \times 376 \times 133$ mm

Key Features Independent wavelength and passband width tuning Free-space optical architecture for precision control USB interface with LabVIEW software; GPIB remote control Flat-top passband design for sharp spectral response Low-loss, polarization-insensitive performance

Typical Applications 40 Gb/s and 100 Gb/s transmission testing DWDM channel selection and isolation ASE noise filtering in amplified systems Optical spectrum analysis Fiber optic sensing Optical wavelength cross-connect (OXC) systems Pulse shaping Incoherent light source generation with broadband sources

Compatibility & Integration USB and GPIB interfaces support both manual and automated operation. LabVIEW software enables programmatic control for test automation and wavelength scanning protocols.

Features & description

From manufacturer datasheet

Features

- Independent wavelength and -3 dB bandwidth tuning
- Flat-top passband grating filter
- Typical wavelength accuracy 0.02 nm (50 GHz C-band table)
- Typical insertion loss 5 dB; return loss typically 45 dB
- GPIB and USB (OTF-950-C-S-F-SP-B listing)
- Example code OTF-950-C-S-F-SP-B: C-band, SMF, FC, SPC

OTF950 Characteristics / Specifications

PARAMETER	VALUE
Model	OTF-950
Manufacturer	Santec
Instrument Type	Optical Tunable Filter (grating, bandwidth-variable)
Series	OTF tunable filters
Alias	OTF-950; OTF-950-C; OTF-950-C-S-F-SP-B
Wavelength Tuning Range Table	40 nm minimum (50 GHz C-band datasheet)
C Band Example	1525 to 1565 nm (OTF-950-C listing)
Bandwidth Tuning 3 dB	0.25 to 6.0 nm (50 GHz table); 0.2 to 6.0 nm at -3 dB (Japanese C-band listing)
Bandwidth Tuning 20 dB	0.70 to 6.5 nm (50 GHz table)
Wavelength Accuracy Typical	0.02 nm
Insertion Loss Typical	5 dB
Insertion Loss Uniformity Typical	0.5 dB
PDL Typical	0.25 dB
PMD Typical	0.2 ps
Chromatic Dispersion	-40 to +40 ps/nm
Return Loss Typical	45 dB
Return Loss Minimum Listing	40 dB
Optical Connector Example	FC/SPC
Optical Fiber Example	SMF
Remote Interface Listing	GPIB and USB
Filter Architecture	grating-based free-space optics, flat-top passband
Band Option	C-band DWDM (common OTF-950-C)
Successor	OTF-980
Support Status	support ended (Santec discontinued list)
Related Discontinued Family	OTF-930, OTF-920, OTF-910, OTF-900

PARAMETER	VALUE
Example Full Code	OTF-950-C-S-F-SP-B
Fiber Code S	SMF
Connector Code F	FC
Polish Code SP	SPC
ITU Grid Use	50 GHz DWDM channel selection (datasheet context)
Maximum Input Family	confirm on rear label; related OTF-930 max +20 dBm isadifferent model
Power Monitor Family	not specified on the short OTF-950 tables used here Notes Specs from Santec OTF-950 C-band reseller/OEM tables and Santec discontinued-product list. Do not apply OTF-930 sliding-filter numbers to OTF-950. ConfirmCversus other band, FC/SC, and SPC/APC on the unit label.
Example code OTF-950-C-S-F-SP-B	C-band, SMF, FC, SPC
Bandwidth	control for C-band DWDM. A typical C-band unit tunes 40 nm (1525 to 1565 nm on OTF-950-C listings) with -3 dB bandwidth from 0.25 to 6.0 nm (one listing 0.2 to 6.0 nm). Flat-top passband, GPIB and USB control. Discontinued; Santec lists OTF-980 as th
Return loss	typically 45 dB - GPIB and USB (OTF-950-C-S-F-SP-B listing) - Example code OTF-950-C-S-F-SP-B: C-band, SMF, FC, SPC

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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Model	OTF-950
Manufacturer	Santec
Instrument Type	Optical Tunable Filter (grating, bandwidth-variable)
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Alias	OTF-950; OTF-950-C; OTF-950-C-S-F-SP-B
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Band Option	C-band DWDM (common OTF-950-C)
Successor	OTF-980
Support Status	support ended (Santec discontinued list)
Related Discontinued Family	OTF-930, OTF-920, OTF-910, OTF-900

PARAMETER	VALUE
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ITU Grid Use	50 GHz DWDM channel selection (datasheet context)
Maximum Input Family	confirm on rear label; related OTF-930 max +20 dBm isadifferent model
Power Monitor Family	not specified on the short OTF-950 tables used here

Notes

Specs from Santec OTF-950 C-band reseller/OEM tables and Santec discontinued-product list. Do not apply OTF-930 sliding-filter numbers to OTF-950. ConfirmCversus other band, FC/SC, and SPC/APC on the unit label.

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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NIST-traceable calibration · SAM registered ·
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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.