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Data Sheet

August 3, 2026

THORLABS

ThorLabs ASE-FL7002 High-Stability Broadband Multichannel ASE Source

Power Stability (Max): ± 0.005 dB (15 min) Related Model: ASE-FL7002-C4 (4-channel configuration) Allow thermal stabilization before stability-critical measurements. Use angled or PC connectors matching the faceplate. Observe maximum output and eye-safety class for ASE sources. ASE-FL7002 is the base/series designation–ASE-FL7002-C4 is the explicit 4-channel configuration. Confirm faceplate C4 vs non-C4 and channel count. Alias ASEFL7002. Related Model: ASE-FL7002-C4 (4-channel configuration) Allow thermal stabilization before stability-critical measurements. Use angled or PC connectors matching the faceplate. Observe maximum output and eye-safety class for ASE sources. ASE-FL7002 is the base/series designation–ASE-FL7002-C4 is the explicit 4-channel configuration. Confirm faceplate C4 vs non-C4 and channel count. Alias ASEFL7002.



MODEL

ThorLabs ASE-FL7002

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

ASE-FL7002

LISTING

<https://aumictechlabs.com/products/ase-fl7002-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ThorLabs ASE-FL7002 is a high-stability broadband amplified spontaneous emission (ASE) source engineered for precision optical testing across telecommunications and photonics applications. It delivers consistent, low-noise output spanning the C and L bands with exceptional

wavelength stability and innovative active stabilization. The single Er-doped fluoride fiber, optically pumped by a 1480 nm laser diode, generates >13 dBm total output power with ultra-low intensity noise and spectral density exceeding -11 dBm/nm across the 1540–1600 nm region. Power stability reaches ± 0.001 dB over 15 minutes (typical), making it suitable for demanding laboratory and industrial measurement environments. Multichannel variants, including the ASE-FL7002-C4 with 4 outputs (>20 mW combined, ~10 mW per channel), extend flexibility for complex optical systems.

Technical Specifications

Spectral Range: 1530 nm to 1610 nm
Bandwidth: >60 nm
Total Output Power: ≥ 13 dBm (20 mW)
Spectrum Density (Typical): >-18 dBm/nm @ 1530 nm; >-11 dBm/nm @ 1540–1600 nm; >-18 dBm/nm @ 1610 nm
Power Stability (Typical): ± 0.001 dB over 15 minutes
Power Stability (Maximum): ± 0.005 dB over 15 minutes
Pump Source: Single 1480 nm laser diode
Active Medium: Single Er-doped fluoride fiber
Output Fiber: SMF28
Connectors: FC/PC, FC/APC
Power Input: 100–240 V AC, 50/60 Hz
Operating Temperature: 0°C to 40°C
Storage Temperature: -10°C to 45°C
Dimensions: 230 mm (W) × 88 mm (H) × 352 mm (D)
Weight: Approximately 6.8 kg (15 lbs)
Cooling: Air-cooled

Key Features

- Low intensity noise for clean spectral output
- Exceptional wavelength stability maintained across operating range
- Innovative active stabilization for long-term performance
- Multichannel output options for parallel testing configurations

Typical Applications

- Optical component characterization and testing
- WDM system validation
- Broadband light source for sensor development

Compatibility & Integration

- Single-mode fiber output (SMF28)
- FC/PC and FC/APC connector support

Features & description

From manufacturer datasheet

Features

- High-stability broadband multichannel ASE source
- Wavelength coverage approximately 1530 to 1610 nm (C & L bands)
- Er-doped fluoride fiber; single laser-diode pump architecture
- Power stability ± 0.001 dB typical / ± 0.005 dB max (15 minutes)
- Low intensity noise; exceptional wavelength stability
- Active stabilization; reduced need for frequent recalibration
- SMF-28 output fiber class; FC/PC optical interface class
- Related C4 variant: four discrete laser/ASE outputs

ASEFL7002 Characteristics / Specifications

PARAMETER	VALUE
Model	ASE-FL7002
Manufacturer	Thorlabs
Instrument Type	Broadband Multichannel ASE Source
Wavelength Range	1530 to 1610 nm
Power Stability (Typical)	±0.001 dB (15 min)
Power Stability (Max)	±0.005 dB (15 min)
Output Fiber	SMF-28 class
Related Model	ASE-FL7002-C4 (4-channel configuration)
Alias	ASE-FL7002 Standard Operating Conditions Allow thermal stabilization before stability-critical measurements. Use angled or PC connectors matching the faceplate. Observe maximum output and eye-safety class for ASE sources.
Related C4 variant	four discrete laser/ASE outputs
Wavelength stability	Active stabilization; reduced need for frequent recalibration - SMF-28 output fiber class; FC/PC optical interface class - Related C4 variant: four discrete laser/ASE outputs
Power stability	for optical component and WDM test.

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
Model	ASE-FL7002
Manufacturer	Thorlabs
Instrument Type	Broadband Multichannel ASE Source
Wavelength Range	1530 to 1610 nm
Power Stability (Typical)	±0.001 dB (15 min)
Power Stability (Max)	±0.005 dB (15 min)
Output Fiber	SMF-28 class
Related Model	ASE-FL7002-C4 (4-channel configuration)
Alias	ASE-FL7002

Standard Operating Conditions

Allow thermal stabilization before stability-critical measurements. Use angled or PC connectors matching the faceplate. Observe maximum output and eye-safety class for ASE sources.

Operational Notes

ASE-FL7002 is the base/series designation-ASE-FL7002-C4 is the explicit 4-channel configuration. Confirm faceplate C4 vs non-C4 and channel count. Alias ASEFL7002.

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.