

Agilent 83437A Specifications

Performance Specifications and Characteristics

Peak wavelength	1200 ±30 nm	1310 ±20 nm	1430 ±30 nm	1550 ±20 nm ¹	1650 ±30 nm
3 dB width ²	45 nm	47 nm	50 nm	52 nm	55 nm
Total power ^{3,7}	> -17 dBm 20 µW	> -13 dBm 50 µW	> -13 dBm 50 µW	> -13 dBm 50 µW	> -17 dBm 20 µW
Peak density ^{2,3}	> -37 dBm [1 nm] >200 nW/nm	> -33 dBm [1 nm] >500 nW/nm	> -33 dBm [1 nm] >500 nW/nm	> -33 dBm [1 nm] >500 nW/nm	> -37 dBm [1 nm] >200 nW/nm
Compatible fiber	9/125 µm, single-mode				
Output return loss ²	>25 dB (50 dB ⁵)				
Power stability ⁴	(1310/1430/1550) <±0.02 dB (15 min), <±0.05 dB (6 h) (1200/1650) <±0.03 dB (15 min), <±0.05 dB (6 h)				
Modulation ²	Digital (TTL compatible input), 100% on-off, DC to 100 kHz				
LED safety	IEC 825-1 Class 1				
Weight	5.5 kg (12 lbs)				
Dimensions ⁶	102 H x 213 W x 450 D mm (4.02 H x 8.39 W x 17.72 D in)				
Power	90 to 132 V or 198 to 264 V AC, 47 to 63 Hz, 50 W				
Operating temperature	0 to +45°C				
Storage temperature	-40 to +70°C				

¹ Default configuration

² Characteristic value (not warranted).

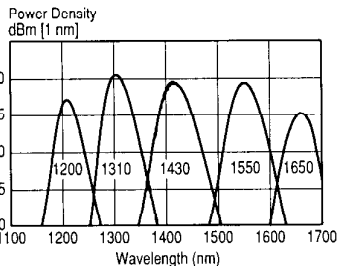
³ Configurations with multiple EELEDs have less power. Typical losses are 3.5 dB *per coupler* except the 1310/1550 nm and the 1430/1650 coupler which have less than 1 dB loss (see spectra for typical configurations, and see page 2 for a block diagram).

⁴ Ambient temperature change <±1°C, measured with power meter having >30 dB return loss and after 1 hour warm-up time.

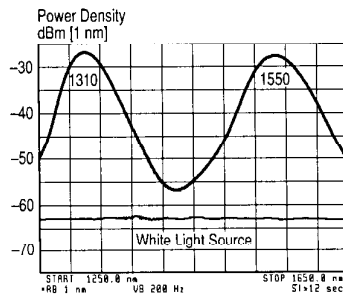
⁵ Measured at 1550 nm with isolator (83437A-001) and FC/APC connector (83437A-022).

⁶ System II chassis (half module, 3 1/2" height, 1.75" hole spacing).

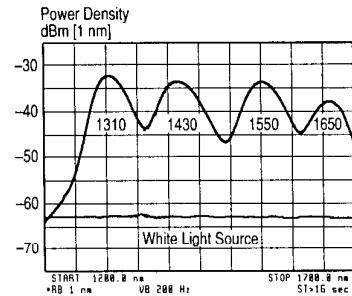
⁷ Measured with an InGaAs power sensor.



Characteristic spectra in single EELED configurations



Characteristic spectrum in the 1310/1550 nm dual EELED configuration (Agilent 83437A with options 003 and 705)



Characteristic spectrum when four EELEDs are installed (Agilent 83437A with options 003, 004, 006 and 705)

Ordering Information

83437A Broadband (EELED) Light Source

Source Options

- 83437A-002 1200 nm EELED
- 83437A-003 1310 nm EELED
- 83437A-004 1430 nm EELED
- 83437A-705 1550 nm EELED (default configuration)
- 83437A-006 1650 nm EELED

No more than four EELEDs can be installed at a time (see block diagram on page 2). Option 001 requires the default configuration (Option 705, 1550 nm EELED only).

83437A-001 1550 nm Isolator

Connector Options

- 83437A-020 Straight (non-angled) Contact Interface-PC (default)
- 83437A-022 Angled Contact Interface-APC
- 81000A1 Diamond HMS-10 Connector
- 81000F1 FC Connector (default)
- 81000K1 SC Connector
- 81000S1 DIN Connector
- 81000V1 ST Connector

Accessories and Documentation

- 83437A-AB0 Taiwan-Chinese localization
- 83437A-UK6 Commercial calibration certificate with test data
- 83437A-1CM Rack mount kit
- 83437A-1CN Front handles
- 83437A-1CP Rack mount kit with handles

Have to have opt. to have the