O to E Converters

OE425 OE455

Multi-mode Optical-to-Electrical Converters

LEADING FEATURES

- Frequency range to 5 GHz (6 GHz optical)
- 62.5 µm multi-mode fiber input
- Broad wavelength range: 500–870 nm (OE425), 950–1630 nm (OE455)
- High responsivity: 1.1 V/mW
- Low noise: 1.1 μW rms



OE455 optical-to-electrical converter shown with multi-mode fiber jumper attached.

The OE425 and OE455 are wide-band multi-mode optical-to-electrical converters designed for measuring optical communications signals. Their broad wavelength range and multi-mode input optics make these devices ideal for applications including Gigabit Ethernet and Fibrechannel, as well as SONET/SDH up to 2.5 Gb/s.

The OE425 and OE455 are ProBus® modules compatible with WavePro and Waverunner oscilloscopes as well as WaveMaster instruments when used with a LPA-BNC adapter.

Universal Calibrated Reference Receivers

The O/E converters contain calibration data that can be used to create optical reference receivers for SONET/SDH (up to OC48/STM16), Fibre Channel, Gigabit Ethernet and other optical standards. This feature is available when the O/E is used on a WaveMaster series oscilloscope. This universal reference receiver supports any data rate up to 3 GHz and remains calibrated on any channel of any WaveMaster.



Specifications

 OE425
 OE455

 Wavelength Range:
 500–870 nm
 950–1630 nm

460–870 nm (.1V/mW) 800–1630 nm (.1V/mW)

1.2 µW rms

Conversion Gain: 0.5 V/mW 1.1 V/mW

Bandwidth: 5 GHz (6 GHz optical) 3.5 GHz (4.5 GHz optical)

Equivalent Noise: 2.2 µW rms

Maximum Optical Power

 (at 5% saturation):
 2.2 mW
 1.3 mW

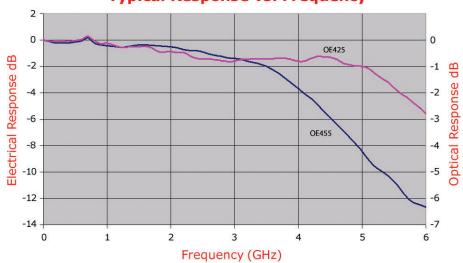
 Rise Time:
 90 ps
 108 ps

 Maximum Safe Input:
 5.5 mW
 1.3 mW

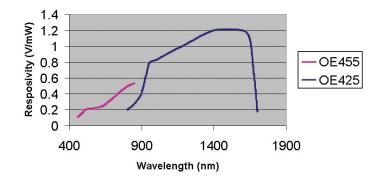
Temperature Drift: 0.00275 dB/deg. C 0.00275 dB/deg. C

Frequency Response Ripple: 1.1 dB 1.1 dB Connector Type: FC/PC FC/PC

Typical Response vs. Frequency



Responsivity



Ordering Information	Product Code
Short wavelength O/E converter (500–870 nm)	OE425
Long wavelength O/E converter (950–1630 nm)	OE455

Sales and Service Throughout the World

Corporate Headquarters

700 Chestnut Ridge Road Chestnut Ridge, NY 10977 USA

http://www.lecroy.com

LeCroy Sales Offices:

Asia: Hong Kong Phone (852) 2834 5630 Fax (852) 2834 9893

Austria: Markersdorf Phone (43) 2749 30050 Fax (43) 2749 30051

Benelux: The Netherlands Phone (31) 40 211 6998 Fax (31) 40 211 6999

China: Beijing Phone (86) 10 8526 1616 Fax (86) 10 8526 1619

France: Les Ulis Phone (33) 1 69 18 83 20 Fax (33) 1 69 07 40 42

Germany: Heidelberg Phone (49) 6221 827 00 Fax (49) 6221 834 655

Italy: Venice Phone (39) 041 456 97 00 Fax (39) 041 456 95 42

Japan: Osaka Phone (81) 6 6396 0961 Fax (81) 6 6396 0962

Japan: Tokyo Phone (81) 3 3376 9400 Fax (81) 3 3376 9587

Korea: Seoul Phone (82) 2 3452 0400 Fax (82) 2 3452 0490

Singapore Phone (65) 6442 4880 Fax (65) 6442 7811

Spain: Madrid Phone: (34) 91 571 0024 Fax: (34) 91 571 2346

U.K.: Abingdon Phone (44) 1 235 536 973 Fax (44) 1 235 528 796

U.S.A.: Chestnut Ridge Phone (1) 845 578 6020 Fax (1) 845 578 5985

