56 Sparta Avenue • Newton, New Jersey 07860
(973) 300-3000 Sales • (973) 300-3600 Fax
www.thorlabs.com

THORLABS

LS5 Series Lasers - July 09, 2019

The LS5 Series of DWDM Lasers was discontinued on July 09, 2019. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

DWDM LASER SOURCES - LS5000

- **Wavelengths: 1530.11 to 1611.79 nm (ITU 1100 Grid)**
- **Excellent Stability**
- **Wavelength and Power Tuning**

LS5000 Modules

ITC5000 & LS5000 Modules in TXP5016 Chassis

Easy-to-Use Graphical Interface (PC Not Included)

OVERVIEW

LS5000 Features

- CW DFB Laser Source
- L-, and C-Band on 100 GHz ITU Grid
- Output Power: 20 mW
- Unbeatable Wavelength Stability:<5 pm / 24 hrs
- Extremely Stable Output Power <0.01dB / 24 hrs
- Precise Wavelength Tuning: over ±0.85 nm
- Precise Power Attenuation: over 6 dB, 10 dB typ.
- Versatile Coherence Control
- Variable Coherence Control, Linewidths Adjustable up to 1 GHz
- Stimulated Brillouin Scattering Suppression
- FC/APC Connector

LS5000 Applications

- WDM Light Comb for Erbium Doped Fiber Amplifier (EDFA) Testing
- Photonic Component Testing
- Bit Error Rater (BER) Link Measurements
- Multi-Laser Optical Source DWDM Transmission Experiments

Introduction

The **LS5000 Series Modules** are DWDM DFB Laser Sources for the TXP platform . These laser source modules cover the 1530.33 – 1611.79 nm wavelength range, on the 100 GHz ITU grid, and provide 20 mW optical power. The optical power can be tuned over 6 dB, and the wavelength over ± 0.85 nm. These light source modules have been designed for excellent stability in power and wavelength, providing reliable measurement results for test setups characterizing BER link performance and EDFA parameters. The modules feature internal modulation capabilities for flexible coherence control, especially the triangular modulation format for efficient suppression of Stimulated Brillouin Scattering in fibers.

Stability, Accuracy, and Dependability
This DWDM laser platform is the ideal choice for demanding DWDM test and measurement applications with laser linewidths of less than 10 MHz, center wavelength stability of better than 0.005 nm per 24 hours, and wavelength accuracy of better than ±0.025 nm. We use only telecom-rated, butterfly packaged DFB lasers with integrated TEC elements, optical isolators, and low back-reflection fiber pigtails. When combined with our sophisticated drive circuits, the result is an extremely stable, low-noise laser source that exhibits optical power stability better than 0.005 dB per 60 minutes and a relative intensity noise RIN figure of typ. -145dB/Hz. All Thorlabs' instruments are backed by an extensive two-year warranty on materials and workmanship.

Coherence Control, Internal Modulation
For high-precision power measurements, the narrow linewidth of a DFB laser can lead to interference effects caused by reflections from the multiple surfaces that are present in most optical systems. These multiple reflections, while extremely small, can accumulate due to the long coherence length of the laser light. Brillouin scattering is another effect that can lead to significant errors when making optical power measurements in fiber-based systems.

The magnitude of these effects can be significantly reduced by increasing the linewidths of the source. Therefore, all the DWDM-series laser sources provide an adjustable coherence length control. Here a small signal modulation on the laser current is used to broaden the DFB laser linewidth from a few MHz up to more than 1 GHz. The **LS5000 Series** provides continuous adjustment of the linewidth over this entire range. An internal, freely running, sine wave/square/triangle wave generator is used to modulate the laser current. The modulation frequency range of the function generator is 20 Hz to 20 kHz with up to 100% modulation depths. Using these features, an ideal non-discrete Gaussian-shaped distribution or a discrete spectral distribution is generated.

External Analog LF Modulation, DC to 50 kHz (Optional)
For applications where a precise LF modulation up to 50 kHz is required, the DWDM modules are available with an LF modulation option. With this option, the output power can be modulated via an optional SMA input. The laser remains fully protected due to a precise limit circuit located inside the module.

Precision Wavelength Tuning
The wavelength is displayed with a resolution of 0.001 nm on the LS5000 GUI or can be read through the data interface of the TXP-Chassis (USB or Ethernet) with a resolution of 0.001 nm. By precisely controlling the temperature of the laser chip, the emitted wavelength can be tuned over a range of ±0.85 nm (approximately ±100 GHz). This range allows the central wavelength of the source to be shifted from one transmission channel to either of the adjacent channels for dense WDM systems with 100 GHz channel spacing or tuning over up to 8 channels for systems with 25 GHz channel spacing. This feature is useful for simulating crosstalk between channels. It can also be used to measure the profile of narrow band DWDM filters. Manual polarization controllers can be supplied as accessories for laser modules. They can be used to adapt the state of polarization in the fiber to polarizationdependant external modulators.

Operation
A TXP chassis is required for the operation of the **LS5000 Series** modules . The modules are hot-pluggable; they can be inserted or removed during the operation of other modules. An intuitive graphical user interface (GUI) for the **LS5000 Series** modules is delivered with the **TXP chassis**, as well as drivers for LabVIEW™, LabWindows/CVI™, MSVC and Borland C.

For further information, please contact our Tech Support Team.

SPECS

Technical Data LS5000 DWDM Laser Source Modules	
Wavelength	
Options	100 Wavelengths within ITU Grid in C and L-Bands[a]
Tuning Range	±0.85 nm
Accuracy	±0.025 nm, Typ.< ±0.01 nm
Stability typ.	<0.005 nm Over 24 hrs
Resolution	1 pm
Laser Linewidth	<10 MHz
Output Power	
Optical Power	20 mW
Accuracy (abs./ rel.)	0.6 dB / 0.4 dB
Stability (Coherence Control active)	<0.002 dB Over 15 s, <0.005 dB Over 60 min, <0.01 dB Over 24 hrs

Attenuation Range	>6 dB; 10 dB Typ. (Continuously Variable)
Resolution	0.01 dB
Side Mode Suppression Ratio (SMSR)	>40 dB Typ. (>36 dB Min) at Max Power
Relative Intensity Noise (RIN)	-145 dB/Hz Typ.
Optical Isolation	>35 dB
Coherence Control (Standard Feature, All Models)	
Linewidth	Up to 1 GHz (Adjustable)
Shape	Sine, Square, and Triangle
Frequency	0.02 to up to 20 kHz
Modulation Depth	0.1 to 100%
Modulation	
Analog LF Modulation	DC to 50 kHz (Option, via SMA Input at the Module)
General Data	
Optical Output (Standard)	FC/APC[b]
Fiber	PMF[c]
Operating Temperature	0 to 35 °C (non condensing)
Storing Temperature	-40 to 60 °C
Warm-Up Time for Rated Accuracy	15 min
Laser Module Width	1 TXP Slot
Weight	<0.7 kg
Laser Safety Class	1M

- a. Subject to DFB laser diode availability, 25GHz and 50GHz grid on request
- b. Other connector styles (SC, E2000...) and non-angled (PC) ferrule on request
- c. Connector key aligned to slow axis on request (All technical data are valid at 23 ± 5 °C and 45 ± 15% relative humidity)

SOFTWARE

The Software Package for the TXP5000 Platform contains the Software Modules for the LS5000

TXP Software

Version 3.1.5

Standard full TXP software packages for the LS5000:
Applications, Drivers, and Firmware.

Software

Part Number	Description	Price	Availability
LS5-C-01A-20-NM	TXP DWDM source 191.00 THz/1569.59 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-01B-20-NM	TXP DWDM source 191.05 THz/1569.18 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-01C-20-NM	TXP5000 DWDM source, 191.025 THz/1569.39 nm, 20mW,	$2,958.49	Lead Time

LS5-C-01D-20-NM	TXP5000 DWDM source, 191.075 THz/1568.98 nm, 20mW,	$2,958.49	Lead Time
LS5-C-02A-20-NM	TXP DWDM source 191.10 THz/1568.77 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-02B-20-NM	TXP DWDM source 191.15 THz/1568.36 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-02C-20-NM	TXP5000 DWDM source, 191.125 THz/1568.57 nm, 20mW,	$2,958.49	Lead Time
LS5-C-02D-20-NM	TXP5000 DWDM source, 191.175 THz/1568.16 nm, 20mW,	$2,958.49	Lead Time
LS5-C-03A-20-NM	TXP DWDM source 191.20 THz/1567.95 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-03B-20-NM	TXP DWDM source 191.25 THz/1567.54 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-03C-20-NM	TXP5000 DWDM source, 191.225 THz/1567.75 nm, 20mW,	$2,958.49	Lead Time
LS5-C-03D-20-NM	TXP5000 DWDM source, 191.275 THz/1567.34 nm, 20mW,	$2,958.49	Lead Time
LS5-C-04A-20-NM	TXP DWDM source 191.30 THz/1567.13 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-04B-20-NM	TXP DWDM source 191.35 THz/1566.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-04C-20-NM	TXP5000 DWDM source, 191.325 THz/1566.93 nm, 20mW,	$2,958.49	Lead Time
LS5-C-04D-20-NM	TXP5000 DWDM source, 191.375 THz/1566.52 nm, 20mW,	$2,958.49	Lead Time
LS5-C-05A-20-NM	TXP DWDM source 191.40 THz/1566.31 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-05B-20-NM	TXP DWDM source 191.45 THz/1565.90 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-05C-20-NM	TXP5000 DWDM source, 191.425 THz/1566.11 nm, 20mW,	$2,958.49	Lead Time
LS5-C-05D-20-NM	TXP5000 DWDM source, 191.475 THz/1565.7 nm, 20mW,	$2,958.49	Lead Time
LS5-C-06A-20-NM	TXP DWDM source 191.50 THz/1565.50 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-06B-20-NM	TXP DWDM source 191.55 THz/1565.09 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-06C-20-NM	TXP5000 DWDM source, 191.525 THz/1565.29 nm, 20mW,	$2,958.49	Lead Time
LS5-C-06D-20-NM	TXP5000 DWDM source, 191.575 THz/1564.88 nm, 20mW,	$2,958.49	Lead Time
LS5-C-07A-20-NM	TXP DWDM source 191.60 THz/1564.68 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-07B-20-NM	TXP DWDM source 191.65 THz/1564.27 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-07C-20-NM	TXP5000 DWDM source, 191.625 THz/1564.47 nm, 20mW,	$2,958.49	Lead Time
LS5-C-07D-20-NM	TXP5000 DWDM source, 191.675 THz/1564.07 nm, 20mW,	$2,958.49	Lead Time
LS5-C-08A-20-NM	TXP DWDM source 191.70 THz/1563.86 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-08B-20-NM	TXP DWDM source 191.75 THz/1563.45 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-08C-20-NM	TXP5000 DWDM source, 191.725 THz/1563.66 nm, 20mW,	$2,958.49	Lead Time
LS5-C-08D-20-NM	TXP5000 DWDM source, 191.775 THz/1563.25 nm, 20mW,	$2,958.49	Lead Time
LS5-C-09A-20-NM	TXP DWDM source 191.80 THz/1563.05 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-09B-20-NM	TXP DWDM source 191.85 THz/1562.64 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-09C-20-NM	TXP5000 DWDM source, 191.825 THz/1562.84 nm, 20mW,	$2,958.49	Lead Time
LS5-C-09D-20-NM	TXP5000 DWDM source, 191.875 THz/1562.44 nm, 20mW,	$2,958.49	Lead Time
LS5-C-11A-20-NM	TXP DWDM source 192.00 THz/1561.42 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-11B-20-NM	TXP DWDM source 192.05 THz/1561.01 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-11C-20-NM	TXP5000 DWDM source, 192.025 THz/1561.22 nm, 20mW,	$2,958.49	Lead Time
LS5-C-11D-20-NM	TXP5000 DWDM source, 192.075 THz/1560.81 nm, 20mW,	$2,958.49	Lead Time
LS5-C-12A-20-NM	TXP DWDM source 192.10 THz/1560.61 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-12B-20-NM	TXP DWDM source 192.15 THz/1560.20 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-12C-20-NM	TXP5000 DWDM source, 192.125 THz/1560.4 nm, 20mW,	$2,958.49	Lead Time
LS5-C-12D-20-NM	TXP5000 DWDM source, 192.175 THz/1560 nm, 20mW, FC	$2,958.49	Lead Time
LS5-C-13A-20-NM	TXP DWDM source 192.20 THz/1559.79 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-13B-20-NM	TXP DWDM source 192.25 THz/1559.39 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-13C-20-NM	TXP5000 DWDM source, 192.225 THz/1559.59 nm, 20mW,	$2,958.49	Lead Time
LS5-C-13D-20-NM	TXP5000 DWDM source, 192.275 THz/1559.19 nm, 20mW,	$2,958.49	Lead Time
LS5-C-14A-20-NM	TXP DWDM source 192.30 THz/1558.98 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-14B-20-NM	TXP DWDM source 192.35 THz/1558.58 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-14C-20-NM	TXP5000 DWDM source, 192.325 THz/1558.78 nm, 20mW,	$2,958.49	Lead Time
LS5-C-14D-20-NM	TXP5000 DWDM source, 192.375 THz/1558.38 nm, 20mW,	$2,958.49	Lead Time

LS5-C-15A-20-NM	TXP DWDM source 192.40 THz/1558.17 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-15B-20-NM	TXP DWDM source 192.45 THz/1557.77 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-15C-20-NM	TXP5000 DWDM source, 192.425 THz/1557.97 nm, 20mW,	$2,958.49	Lead Time
LS5-C-15D-20-NM	TXP5000 DWDM source, 192.475 THz/1557.57 nm, 20mW,	$2,958.49	Lead Time
LS5-C-16A-20-NM	TXP DWDM source 192.50 THz/1557.36 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-16B-20-NM	TXP DWDM source 192.55 THz/1556.96 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-16C-20-NM	TXP5000 DWDM source, 192.525 THz/1557.16 nm, 20mW,	$2,958.49	Lead Time
LS5-C-16D-20-NM	TXP5000 DWDM source, 192.575 THz/1556.76 nm, 20mW,	$2,958.49	Lead Time
LS5-C-17A-20-NM	TXP DWDM source 192.60 THz/1556.55 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-17B-20-NM	TXP DWDM source 192.65 THz/1556.15 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-17C-20-NM	TXP5000 DWDM source, 192.625 THz/1556.35 nm, 20mW,	$2,958.49	Lead Time
LS5-C-17D-20-NM	TXP5000 DWDM source, 192.675 THz/1555.95 nm, 20mW,	$2,958.49	Lead Time
LS5-C-18A-20-NM	TXP DWDM source 192.70 THz/1555.75 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-18B-20-NM	TXP DWDM source 192.75 THz/1555.34 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-18C-20-NM	TXP5000 DWDM source, 192.725 THz/1555.55 nm, 20mW,	$2,958.49	Lead Time
LS5-C-18D-20-NM	TXP5000 DWDM source, 192.775 THz/1555.14 nm, 20mW,	$2,958.49	Lead Time
LS5-C-19A-20-NM	TXP DWDM source 192.80 THz/1554.94 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-19B-20-NM	TXP DWDM source 192.85 THz/1554.54 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-19C-20-NM	TXP5000 DWDM source, 192.825 THz/1554.74 nm, 20mW,	$2,958.49	Lead Time
LS5-C-19D-20-NM	TXP5000 DWDM source, 192.875 THz/1554.34 nm, 20mW,	$2,958.49	Lead Time
LS5-C-20A-20-NM	TXP DWDM source 192.90 THz/1554.13 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-20B-20-NM	TXP DWDM source 192.95 THz/1553.73 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-20C-20-NM	TXP5000 DWDM source, 192.925 THz/1553.93 nm, 20mW,	$2,958.49	Lead Time
LS5-C-20D-20-NM	TXP5000 DWDM source, 192.975 THz/1553.53 nm, 20mW,	$2,958.49	Lead Time
LS5-C-21A-20-NM	TXP DWDM source 193.00 THz/1553.33 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-21D-20-NM	TXP5000 DWDM source, 193.075 THz/1552.73 nm, 20mW,	$2,958.49	Lead Time
LS5-C-22A-20-NM	TXP DWDM source 193.10 THz/1552.52 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-22B-20-NM	TXP DWDM source 193.15 THz/1552.12 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-22C-20-NM	TXP5000 DWDM source, 193.125 THz/1552.32 nm, 20mW,	$2,958.49	Lead Time
LS5-C-22D-20-NM	TXP5000 DWDM source, 193.175 THz/1551.92 nm, 20mW,	$2,958.49	Lead Time
LS5-C-23A-20-NM	TXP DWDM source 193.20 THz/1551.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-23B-20-NM	TXP DWDM source 193.25 THz/1551.32 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-23C-20-NM	TXP5000 DWDM source, 193.225 THz/1551.52 nm, 20mW,	$2,958.49	Lead Time
LS5-C-23D-20-NM	TXP5000 DWDM source, 193.275 THz/1551.12 nm, 20mW,	$2,958.49	Lead Time
LS5-C-24A-20-NM	TXP DWDM source 193.30 THz/1550.92 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-24B-20-NM	TXP DWDM source 193.35 THz/1550.52 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-24C-20-NM	TXP5000 DWDM source, 193.325 THz/1550.72 nm, 20mW,	$2,958.49	Lead Time
LS5-C-24D-20-NM	TXP5000 DWDM source, 193.375 THz/1550.32 nm, 20mW,	$2,958.49	Lead Time
LS5-C-25A-20-NM	TXP DWDM source 193.40 THz/1550.12 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-25B-20-NM	TXP DWDM source 193.45 THz/1549.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-25C-20-NM	TXP5000 DWDM source, 193.425 THz/1549.92 nm, 20mW,	$2,958.49	Lead Time
LS5-C-25D-20-NM	TXP5000 DWDM source, 193.475 THz/1549.52 nm, 20mW,	$2,958.49	Lead Time
LS5-C-26A-20-NM	TXP DWDM source 193.50 THz/1549.32 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-26B-20-NM	TXP DWDM source 193.55 THz/1548.91 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-26C-20-NM	TXP5000 DWDM source, 193.525 THz/1549.11 nm, 20mW,	$2,958.49	Lead Time
LS5-C-26D-20-NM	TXP5000 DWDM source, 193.575 THz/1548.71 nm, 20mW,	$2,958.49	Lead Time
LS5-C-27A-20-NM	TXP DWDM source 193.60 THz/1548.51 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-27B-20-NM	TXP DWDM source 193.65 THz/1548.11 nm, 20mW, FC-A	$2,958.49	Lead Time

LS5-C-27C-20-NM	TXP5000 DWDM source, 193.625 THz/1548.31 nm, 20mW,	$2,958.49	Lead Time
LS5-C-27D-20-NM	TXP5000 DWDM source, 193.675 THz/1547.92 nm, 20mW,	$2,958.49	Lead Time
LS5-C-28A-20-NM	TXP DWDM source 193.70 THz/1547.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-28B-20-NM	TXP DWDM source 193.75 THz/1547.32 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-28C-20-NM	TXP5000 DWDM source, 193.725 THz/1547.52 nm, 20mW,	$2,958.49	Lead Time
LS5-C-28D-20-NM	TXP5000 DWDM source, 193.775 THz/1547.12 nm, 20mW,	$2,958.49	Lead Time
LS5-C-29A-20-NM	TXP DWDM source 193.80 THz/1546.92 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-29B-20-NM	TXP DWDM source 193.85 THz/1546.52 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-29C-20-NM	TXP5000 DWDM source, 193.825 THz/1546.72 nm, 20mW,	$2,958.49	Lead Time
LS5-C-29D-20-NM	TXP5000 DWDM source, 193.875 THz/1546.32 nm, 20mW,	$2,958.49	Lead Time
LS5-C-30A-20-NM	TXP DWDM source 193.90 THz/1546.12 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-30B-20-NM	TXP DWDM source 193.95 THz/1545.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-30C-20-NM	TXP5000 DWDM source, 193.925 THz/1545.92 nm, 20mW,	$2,958.49	Lead Time
LS5-C-30D-20-NM	TXP5000 DWDM source, 193.975 THz/1545.52 nm, 20mW,	$2,958.49	Lead Time
LS5-C-31A-20-NM	TXP DWDM source 194.00 THz/1545.32 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-31B-20-NM	TXP DWDM source 194.05 THz/1544.92 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-31C-20-NM	TXP5000 DWDM source, 194.025 THz/1545.12 nm, 20mW,	$2,958.49	Lead Time
LS5-C-31D-20-NM	TXP5000 DWDM source, 194.075 THz/1544.72 nm, 20mW,	$2,958.49	Lead Time
LS5-C-32A-20-NM	TXP DWDM source 194.10 THz/1544.53 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-32B-20-NM	TXP DWDM source 194.15 THz/1544.13 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-32C-20-NM	TXP5000 DWDM source, 194.125 THz/1544.33 nm, 20mW,	$2,958.49	Lead Time
LS5-C-32D-20-NM	TXP5000 DWDM source, 194.175 THz/1543.93 nm, 20mW,	$2,958.49	Lead Time
LS5-C-33A-20-NM	TXP DWDM source 194.20 THz/1543.73 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-33B-20-NM	TXP DWDM source 194.25 THz/1543.33 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-33C-20-NM	TXP5000 DWDM source, 194.225 THz/1543.53 nm, 20mW,	$2,958.49	Lead Time
LS5-C-33D-20-NM	TXP5000 DWDM source, 194.275 THz/1543.13 nm, 20mW,	$2,958.49	Lead Time
LS5-C-34A-20-NM	TXP DWDM source 194.30 THz/1542.94 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-34B-20-NM	TXP DWDM source 194.35 THz/1542.54 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-34C-20-NM	TXP5000 DWDM source, 194.325 THz/1542.74 nm, 20mW,	$2,958.49	Lead Time
LS5-C-34D-20-NM	TXP5000 DWDM source, 194.375 THz/1542.34 nm, 20mW,	$2,958.49	Lead Time
LS5-C-35A-20-NM	TXP DWDM source 194.40 THz/1542.14 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-35B-20-NM	TXP DWDM source 194.45 THz/1541.75 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-35C-20-NM	TXP5000 DWDM source, 194.425 THz/1541.94 nm, 20mW,	$2,958.49	Lead Time
LS5-C-35D-20-NM	TXP5000 DWDM source, 194.475 THz/1541.55 nm, 20mW,	$2,958.49	Lead Time
LS5-C-36A-20-NM	TXP DWDM source 194.50 THz/1541.35 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-36B-20-NM	TXP DWDM source 194.55 THz/1540.95 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-36C-20-NM	TXP5000 DWDM source, 194.525 THz/1541.15 nm, 20mW,	$2,958.49	Lead Time
LS5-C-36D-20-NM	TXP5000 DWDM source, 194.575 THz/1540.76 nm, 20mW,	$2,958.49	Lead Time
LS5-C-37A-20-NM	TXP DWDM source 194.60 THz/1540.56 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-37B-20-NM	TXP DWDM source 194.65 THz/1540.16 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-37C-20-NM	TXP5000 DWDM source, 194.625 THz/1540.36 nm, 20mW,	$2,958.49	Lead Time
LS5-C-37D-20-NM	TXP5000 DWDM source, 194.675 THz/1539.96 nm, 20mW,	$2,958.49	Lead Time
LS5-C-38A-20-NM	TXP DWDM source 194.70 THz/1539.77 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-38B-20-NM	TXP DWDM source 194.75 THz/1539.37 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-38C-20-NM	TXP5000 DWDM source, 194.725 THz/1539.57 nm, 20mW,	$2,958.49	Lead Time
LS5-C-38D-20-NM	TXP5000 DWDM source, 194.775 THz/1539.17 nm, 20mW,	$2,958.49	Lead Time
LS5-C-39A-20-NM	TXP DWDM source 194.80 THz/1538.98 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-39B-20-NM	TXP DWDM source 194.85 THz/1538.58 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-39C-20-NM	TXP5000 DWDM source, 194.825 THz/1538.78 nm, 20mW,	$2,958.49	Lead Time

LS5-C-39D-20-NM	TXP5000 DWDM source, 194.875 THz/1538.38 nm, 20mW,	$2,958.49	Lead Time
LS5-C-41A-20-NM	TXP DWDM source 195.00 THz/1537.40 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-41B-20-NM	TXP DWDM source 195.05 THz/1537.00 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-41C-20-NM	TXP5000 DWDM source, 195.025 THz/1537.2 nm, 20mW,	$2,958.49	Lead Time
LS5-C-41D-20-NM	TXP5000 DWDM source, 195.075 THz/1536.81 nm, 20mW,	$2,958.49	Lead Time
LS5-C-42A-20-NM	TXP DWDM source 195.10 THz/1536.61 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-42B-20-NM	TXP DWDM source 195.15 THz/1536.22 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-42C-20-NM	TXP5000 DWDM source, 195.125 THz/1536.41 nm, 20mW,	$2,958.49	Lead Time
LS5-C-42D-20-NM	TXP5000 DWDM source, 195.175 THz/1536.02 nm, 20mW,	$2,958.49	Lead Time
LS5-C-43A-20-NM	TXP DWDM source 195.20 THz/1535.82 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-43B-20-NM	TXP DWDM source 195.25 THz/1535.43 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-43C-20-NM	TXP5000 DWDM source, 195.225 THz/1535.63 nm, 20mW,	$2,958.49	Lead Time
LS5-C-43D-20-NM	TXP5000 DWDM source, 195.275 THz/1535.23 nm, 20mW,	$2,958.49	Lead Time
LS5-C-44A-20-NM	TXP DWDM source 195.30 THz/1535.04 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-44B-20-NM	TXP DWDM source 195.35 THz/1534.64 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-44C-20-NM	TXP5000 DWDM source, 195.325 THz/1534.84 nm, 20mW,	$2,958.49	Lead Time
LS5-C-44D-20-NM	TXP5000 DWDM source, 195.375 THz/1534.45 nm, 20mW,	$2,958.49	Lead Time
LS5-C-45A-20-NM	TXP DWDM source 195.40 THz/1534.25 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-45B-20-NM	TXP DWDM source 195.45 THz/1533.86 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-45C-20-NM	TXP5000 DWDM source, 195.425 THz/1534.05 nm, 20mW,	$2,958.49	Lead Time
LS5-C-45D-20-NM	TXP5000 DWDM source, 195.475 THz/1533.66 nm, 20mW,	$2,958.49	Lead Time
LS5-C-46A-20-NM	TXP DWDM source 195.50 THz/1533.47 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-46B-20-NM	TXP DWDM source 195.55 THz/1533.07 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-46C-20-NM	TXP5000 DWDM source, 195.525 THz/1533.27 nm, 20mW,	$2,958.49	Lead Time
LS5-C-46D-20-NM	TXP5000 DWDM source, 195.575 THz/1532.88 nm, 20mW,	$2,958.49	Lead Time
LS5-C-47A-20-NM	TXP DWDM source 195.60 THz/1532.68 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-47B-20-NM	TXP DWDM source 195.65 THz/1532.29 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-47C-20-NM	TXP5000 DWDM source, 195.625 THz/1532.49 nm, 20mW,	$2,958.49	Lead Time
LS5-C-47D-20-NM	TXP5000 DWDM source, 195.675 THz/1532.09 nm, 20mW,	$2,958.49	Lead Time
LS5-C-48A-20-NM	TXP DWDM source 195.70 THz/1531.90 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-48B-20-NM	TXP DWDM source 195.75 THz/1531.51 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-48C-20-NM	TXP5000 DWDM source, 195.725 THz/1531.7 nm, 20mW,	$2,958.49	Lead Time
LS5-C-48D-20-NM	TXP5000 DWDM source, 195.775 THz/1531.31 nm, 20mW,	$2,958.49	Lead Time
LS5-C-49A-20-NM	TXP DWDM source 195.80 THz/1531.12 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-49B-20-NM	TXP DWDM source 195.85 THz/1530.72 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-49C-20-NM	TXP5000 DWDM source, 195.825 THz/1530.92 nm, 20mW,	$2,958.49	Lead Time
LS5-C-49D-20-NM	TXP5000 DWDM source, 195.875 THz/1530.53 nm, 20mW,	$2,958.49	Lead Time
LS5-C-50A-20-NM	TXP DWDM source 195.90 THz/1530.33 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-50B-20-NM	TXP DWDM source 195.95 THz/1529.94 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-C-50C-20-NM	TXP5000 DWDM source, 195.925 THz/1530.14 nm, 20mW,	$2,958.49	Lead Time
LS5-C-50D-20-NM	TXP5000 DWDM source, 195.975 THz/1529.75 nm, 20mW,	$2,958.49	Lead Time
LS5-L-09A-20-NM	TXP DWDM source 186.80 THz/1604.88 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-22C-20-NM	TXP5000 DWDM source, 188.125 THz/1593.58 nm, 20mW,	$2,958.49	Lead Time
LS5-L-22D-20-NM	TXP5000 DWDM source, 188.175 THz/1593.16 nm, 20mW,	$2,958.49	Lead Time
LS5-L-23A-20-NM	TXP DWDM source 188.20 THz/1592.95 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-23B-20-NM	TXP DWDM source 188.25 THz/1592.52 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-23C-20-NM	TXP5000 DWDM source, 188.225 THz/1592.73 nm, 20mW,	$2,958.49	Lead Time
LS5-L-23D-20-NM	TXP5000 DWDM source, 188.275 THz/1592.31 nm, 20mW,	$2,958.49	Lead Time

LS5-L-24A-20-NM	TXP DWDM source 188.30 THz/1592.10 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-24B-20-NM	TXP DWDM source 188.35 THz/1591.68 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-24C-20-NM	TXP5000 DWDM source, 188.325 THz/1591.89 nm, 20mW,	$2,958.49	Lead Time
LS5-L-24D-20-NM	TXP5000 DWDM source, 188.375 THz/1591.47 nm, 20mW,	$2,958.49	Lead Time
LS5-L-25A-20-NM	TXP DWDM source 188.40 THz/1591.26 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-25B-20-NM	TXP DWDM source 188.45 THz/1590.83 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-25C-20-NM	TXP5000 DWDM source, 188.425 THz/1591.04 nm, 20mW,	$2,958.49	Lead Time
LS5-L-25D-20-NM	TXP5000 DWDM source, 188.475 THz/1590.62 nm, 20mW,	$2,958.49	Lead Time
LS5-L-26A-20-NM	TXP DWDM source 188.50 THz/1590.41 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-26B-20-NM	TXP DWDM source 188.55 THz/1589.99 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-26C-20-NM	TXP5000 DWDM source, 188.525 THz/1590.2 nm, 20mW,	$2,958.49	Lead Time
LS5-L-26D-20-NM	TXP5000 DWDM source, 188.575 THz/1589.78 nm, 20mW,	$2,958.49	Lead Time
LS5-L-27A-20-NM	TXP DWDM source 188.60 THz/1589.57 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-27B-20-NM	TXP DWDM source 188.65 THz/1589.15 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-27C-20-NM	TXP5000 DWDM source, 188.625 THz/1589.36 nm, 20mW,	$2,958.49	Lead Time
LS5-L-27D-20-NM	TXP5000 DWDM source, 188.675 THz/1588.94 nm, 20mW,	$2,958.49	Lead Time
LS5-L-28A-20-NM	TXP DWDM source 188.70 THz/1588.73 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-28B-20-NM	TXP DWDM source 188.75 THz/1588.30 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-28C-20-NM	TXP5000 DWDM source, 188.725 THz/1588.51 nm, 20mW,	$2,958.49	Lead Time
LS5-L-28D-20-NM	TXP5000 DWDM source, 188.775 THz/1588.09 nm, 20mW,	$2,958.49	Lead Time
LS5-L-29A-20-NM	TXP DWDM source 188.80 THz/1587.88 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-29B-20-NM	TXP DWDM source 188.85 THz/1587.46 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-29C-20-NM	TXP5000 DWDM source, 188.825 THz/1587.67 nm, 20mW,	$2,958.49	Lead Time
LS5-L-29D-20-NM	TXP5000 DWDM source, 188.875 THz/1587.25 nm, 20mW,	$2,958.49	Lead Time
LS5-L-30A-20-NM	TXP DWDM source 188.90 THz/1587.04 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-30B-20-NM	TXP DWDM source 188.95 THz/1586.62 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-30C-20-NM	TXP5000 DWDM source, 188.925 THz/1586.83 nm, 20mW,	$2,958.49	Lead Time
LS5-L-30D-20-NM	TXP5000 DWDM source, 188.975 THz/1586.41 nm, 20mW,	$2,958.49	Lead Time
LS5-L-31A-20-NM	TXP DWDM source 189.00 THz/1586.20 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-31B-20-NM	TXP DWDM source 189.05 THz/1585.78 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-31C-20-NM	TXP5000 DWDM source, 189.025 THz/1585.99 nm, 20mW,	$2,958.49	Lead Time
LS5-L-31D-20-NM	TXP5000 DWDM source, 189.075 THz/1585.57 nm, 20mW,	$2,958.49	Lead Time
LS5-L-32A-20-NM	TXP DWDM source 189.10 THz/1585.36 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-32B-20-NM	TXP DWDM source 189.15 THz/1584.95 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-32C-20-NM	TXP5000 DWDM source, 189.125 THz/1585.16 nm, 20mW,	$2,958.49	Lead Time
LS5-L-32D-20-NM	TXP5000 DWDM source, 189.175 THz/1584.74 nm, 20mW,	$2,958.49	Lead Time
LS5-L-33A-20-NM	TXP DWDM source 189.20 THz/1584.53 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-33B-20-NM	TXP DWDM source 189.25 THz/1584.11 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-33C-20-NM	TXP5000 DWDM source, 189.225 THz/1584.32 nm, 20mW,	$2,958.49	Lead Time
LS5-L-33D-20-NM	TXP5000 DWDM source, 189.275 THz/1583.9 nm, 20mW,	$2,958.49	Lead Time
LS5-L-34A-20-NM	TXP DWDM source 189.30 THz/1583.69 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-34B-20-NM	TXP DWDM source 189.35 THz/1583.27 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-34C-20-NM	TXP5000 DWDM source, 189.325 THz/1583.48 nm, 20mW,	$2,958.49	Lead Time
LS5-L-34D-20-NM	TXP5000 DWDM source, 189.375 THz/1583.06 nm, 20mW,	$2,958.49	Lead Time
LS5-L-35A-20-NM	TXP DWDM source 189.40 THz/1582.85 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-35B-20-NM	TXP DWDM source 189.45 THz/1582.44 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-35C-20-NM	TXP5000 DWDM source, 189.425 THz/1582.64 nm, 20mW,	$2,958.49	Lead Time
LS5-L-35D-20-NM	TXP5000 DWDM source, 189.475 THz/1582.23 nm, 20mW,	$2,958.49	Lead Time
LS5-L-36A-20-NM	TXP DWDM source 189.50 THz/1582.02 nm, 20mW, FC-A	$2,958.49	Lead Time

LS5-L-36B-20-NM	TXP DWDM source 189.55 THz/1581.60 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-36C-20-NM	TXP5000 DWDM source, 189.525 THz/1581.81 nm, 20mW,	$2,958.49	Lead Time
LS5-L-36D-20-NM	TXP5000 DWDM source, 189.575 THz/1581.39 nm, 20mW,	$2,958.49	Lead Time
LS5-L-37A-20-NM	TXP DWDM source 189.60 THz/1581.18 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-37B-20-NM	TXP DWDM source 189.65 THz/1580.77 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-37C-20-NM	TXP5000 DWDM source, 189.625 THz/1580.98 nm, 20mW,	$2,958.49	Lead Time
LS5-L-37D-20-NM	TXP5000 DWDM source, 189.675 THz/1580.56 nm, 20mW,	$2,958.49	Lead Time
LS5-L-38A-20-NM	TXP DWDM source 189.70 THz/1580.35 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-38B-20-NM	TXP DWDM source 189.75 THz/1579.93 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-38C-20-NM	TXP5000 DWDM source, 189.725 THz/1580.14 nm, 20mW,	$2,958.49	Lead Time
LS5-L-38D-20-NM	TXP5000 DWDM source, 189.775 THz/1579.73 nm, 20mW,	$2,958.49	Lead Time
LS5-L-39A-20-NM	TXP DWDM source 189.80 THz/1579.52 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-39B-20-NM	TXP DWDM source 189.85 THz/1579.10 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-39C-20-NM	TXP5000 DWDM source, 189.825 THz/1579.31 nm, 20mW,	$2,958.49	Lead Time
LS5-L-39D-20-NM	TXP5000 DWDM source, 189.875 THz/1578.89 nm, 20mW,	$2,958.49	Lead Time
LS5-L-41A-20-NM	TXP DWDM source 190.00 THz/1577.86 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-41B-20-NM	TXP DWDM source 190.05 THz/1577.44 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-41C-20-NM	TXP5000 DWDM source, 190.025 THz/1577.65 nm, 20mW,	$2,958.49	Lead Time
LS5-L-41D-20-NM	TXP5000 DWDM source, 190.075 THz/1577.23 nm, 20mW,	$2,958.49	Lead Time
LS5-L-42A-20-NM	TXP DWDM source 190.10 THz/1577.03 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-42B-20-NM	TXP DWDM source 190.15 THz/1576.61 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-42C-20-NM	TXP5000 DWDM source, 190.125 THz/1576.82 nm, 20mW,	$2,958.49	Lead Time
LS5-L-42D-20-NM	TXP5000 DWDM source, 190.175 THz/1576.4 nm, 20mW,	$2,958.49	Lead Time
LS5-L-43A-20-NM	TXP DWDM source 190.20 THz/1576.20 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-43B-20-NM	TXP DWDM source 190.25 THz/1575.78 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-43C-20-NM	TXP5000 DWDM source, 190.225 THz/1575.99 nm, 20mW,	$2,958.49	Lead Time
LS5-L-43D-20-NM	TXP5000 DWDM source, 190.275 THz/1575.57 nm, 20mW,	$2,958.49	Lead Time
LS5-L-44A-20-NM	TXP DWDM source 190.30 THz/1575.37 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-44B-20-NM	TXP DWDM source 190.35 THz/1574.95 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-44C-20-NM	TXP5000 DWDM source, 190.325 THz/1575.16 nm, 20mW,	$2,958.49	Lead Time
LS5-L-44D-20-NM	TXP5000 DWDM source, 190.375 THz/1574.75 nm, 20mW,	$2,958.49	Lead Time
LS5-L-45A-20-NM	TXP DWDM source 190.40 THz/1574.54 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-45B-20-NM	TXP DWDM source 190.45 THz/1574.13 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-45C-20-NM	TXP5000 DWDM source, 190.425 THz/1574.33 nm, 20mW,	$2,958.49	Lead Time
LS5-L-45D-20-NM	TXP5000 DWDM source, 190.475 THz/1573.92 nm, 20mW,	$2,958.49	Lead Time
LS5-L-46A-20-NM	TXP DWDM source 190.50 THz/1573.71 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-46B-20-NM	TXP DWDM source 190.55 THz/1573.30 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-46C-20-NM	TXP5000 DWDM source, 190.525 THz/1573.51 nm, 20mW,	$2,958.49	Lead Time
LS5-L-46D-20-NM	TXP5000 DWDM source, 190.575 THz/1573.09 nm, 20mW,	$2,958.49	Lead Time
LS5-L-47A-20-NM	TXP DWDM source 190.60 THz/1572.89 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-47B-20-NM	TXP DWDM source 190.65 THz/1572.48 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-47C-20-NM	TXP5000 DWDM source, 190.625 THz/1572.68 nm, 20mW,	$2,958.49	Lead Time
LS5-L-47D-20-NM	TXP5000 DWDM source, 190.675 THz/1572.27 nm, 20mW,	$2,958.49	Lead Time
LS5-L-48A-20-NM	TXP DWDM source 190.70 THz/1572.06 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-48B-20-NM	TXP DWDM source 190.75 THz/1571.65 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-48C-20-NM	TXP5000 DWDM source, 190.725 THz/1571.86 nm, 20mW,	$2,958.49	Lead Time
LS5-L-48D-20-NM	TXP5000 DWDM source, 190.775 THz/1571.45 nm, 20mW,	$2,958.49	Lead Time
LS5-L-49A-20-NM	TXP DWDM source 190.80 THz/1571.24 nm, 20mW, FC-A	$2,958.49	Lead Time

LS5-L-49B-20-NM	TXP DWDM source 190.85 THz/1570.83 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-49C-20-NM	TXP5000 DWDM source, 190.825 THz/1571.03 nm, 20mW,	$2,958.49	Lead Time
LS5-L-49D-20-NM	TXP5000 DWDM source, 190.875 THz/1570.62 nm, 20mW,	$2,958.49	Lead Time
LS5-L-50A-20-NM	TXP DWDM source 190.90 THz/1570.42 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-50B-20-NM	TXP DWDM source 190.95 THz/1570.01 nm, 20mW, FC-A	$2,958.49	Lead Time
LS5-L-50C-20-NM	TXP5000 DWDM source, 190.925 THz/1570.21 nm, 20mW,	$2,958.49	Lead Time
LS5-L-50D-20-NM	TXP5000 DWDM source, 190.975 THz/1569.8 nm, 20mW,	$2,958.49	Lead Time
LS5000-NM	LS5000-NM Card with electronics only; laser diode	$1,564.68	Lead Time