

For Immediate Release

100-200 mW Compact DFB fiber laser module with Low Phase Noise and Narrow Line-width

BIRKERØD, DENMARK, May 8, 2003 - Koheras A/S has launched a compact diode pumped DFB fiber laser module, Koheras BASIK™ Fiber Laser, offering 100-200 mW of single longitudinal output (CW), line-width less than 1 kHz, and unprecedented low phase noise. The small module (43x117x75 mm?) comes with a LEMO input interface and 3 mm jacketed single mode output fiber (optionally Polarisation Maintaining). The fiber laser wavelength is adjustable and can be set to 0.1 pm long term accuracy. The lasers are produced for operation within the wavelength ranges 1030-1090 and 1535-1570 nm and can optionally be supplied as fast tuneable devices (> 20 kHz).

This fiber laser module features an unprecedented narrow line-width and low phase noise performance superior to other comparable sources. It has been designed as a new enabling integrated source to meet the demands of several sensor applications such as LIDAR, security, and oil field sensing, where ultra stable single mode operation, long coherence length and low phase noise are critical parameters.

About Koheras

Koheras A/S develops and manufactures high-quality Bragg grating based DFB fiber lasers. Target applications for Koheras fiber lasers are optical sensors (acoustic, pressure, and other), hydrophones, coherent communications, test and measurement systems for telecom, high resolution spectroscopy, LIDAR, and several high-end markets. The company is 100% owned by NKT Holding, Denmark.

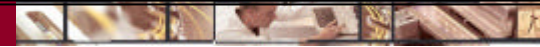
Preliminary data sheet is available on the next page. Visit Koheras at www.koheras.com

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KOHERAS BASIK™ FIBER LASER MODULE

**100-200 mW COMPACT MODULE
ULTRA NARROW LINEWIDTH & LOW PHASE NOISE**

Technologies
creating value



Description

KOHERAS BASIK™ fiber laser module is a compact single wavelength DFB fiber laser sub system with integrated pump laser and thermal control of the fiber laser to ensure a fixed wavelength and overall improved performance. Power levels are available up to 200 mW. This fiber laser features a unique narrow linewidth and low phase noise performance superior to other comparable sources.



*KOHERAS BASIK™
Fiber laser module,
43x117x75 mm?*

Key Features

- Stable single mode and single polarization operation
- Burst noise and mode hop free operation
- Narrow linewidth / long coherence length
- Unprecedented low phase noise
- High wavelength selectability
- PM output
- Small and robust module

Examples of Applications

- LIDAR
- Sensor interferometry
- Acoustic sensing for e.g. marine and security applications
- Motion and intrusion detection
- Laser spectroscopy, gas absorption measurement
- Test and measurement equipment for telecom
- Scientific applications

Specifications

KOHERAS BASIK™ MODULE	E15	Y10
Center wavelength [nm]	1535-1570	1030-1090
Line-width [kHz]	< 2 (typ. << 1)	<30 (typ. <10)
Output power [dBm]	> 20 (optionally up to 23)	> 20 (optionally up to 23)
Signal-to-ASE Noise ratio [dB] (50 pm res.)	> 54	> 60
Wavelength stability [pm/K]	0.1	0.1
RIN peak [kHz] @ 100 mW	> 250	~ 1000
PM output	Optional	Ask
Connectors	FC-APC, FC-PC or other	FC-APC, FC-PC or other
Dimensions (DxLxW) [mm?]	43x117x75	43x117x75
Piezo tuning	Optional	Optional
Operating temperature range [°C]	-20 - 40	-20 - 40
Storage temperature range [°C]	-20 - 50	-20 - 50