### FIBERPRO

# VCSEL Transceiver

**FIBERPRO** provides various types of 850nm Multi-Mode Transceivers with availablility of customized design for Multi-Gigabit rate short haul applications such as Enterprise Network, Server Farm, and Intranet for ISP/ASP.

**FIBERPRO** has devoted all efforts to develop high-speed Optical Link Modules to achieve high quality and low cost of its products through innovation of VCSEL and PIN-PD technology.

**FIBERPRO**, VCSEL experts company using an index guided VCSEL technology, has developed low power consumption and simple packaging. The selective oxidation process plays a key role to get high-speed and low optical jitter of VCSEL transceivers.

As for PIN-PD, **FIBERPRO** enables lower capacitance PD, which causes the lower packaging cost by securing larger margin in PD alignment as well as the better signal quality in terms of jitter characteristics. Thus, **FIBERPRO** transceivers offer excellent input sensitivity of -20dBm at minimum by combining in-house PIN-PD with amplifier. Thus, their power budget gets wider.

For mechanical design, a metal chassis enclosure is taken to result in low EMI and to play a role of electrical reservoir to absolve the Electro-Static Discharge. **FIBERPRO** transceivers are verified or certified in terms of eye safety, EMI / EMS, and component safety by complying with regulation of FCC, FDA, and UL. Additionally, the reliability in application of temperature drift and mechanical harshness is tested in basis of industry or, military test standards.

## YOUR INNOVATIVE FIBER OPTICS PROVIDER



## **Features**

- $\cdot$  High performance of low jitter and wide optical budget
- · Cost effectiveness and flexible customization
- · Reliability of application environments





- · Low EMI / Metal Case
  - · Power supply: Both uses for +3.3V and +5.0V
  - Operating temperature:0℃ to +70℃
    - - · SD out type: TTL
    - Power supply:Both uses for +3.3V and +5.0V Operating temperature : 0°C to +70°C
    - - SD out type:TTL

· Low EMI / Metal Case

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· LC Type (2×5 Small Form Factor)

· Duplex LC connector

- · Supports 1.0625Gbps data
- transfer rate for Fibre Channel

· Excellent performance optical jitter

- Power supply:Both uses for +3.3V and +5.0V · Operating temperature:0℃ to +70℃
- · Link length: 300m(62.5um)/500m(50um) · Output termination: AC

· Low EMI / Metal Case

· SD out type:TTL

# www.fiberpro.com



# **Applications**

- · Gigabit Ethernet
- · Fiber Channel
- High Speed File Servers
- High Performance Desktops
- · InfiniBand

# **Onm Transceiver**

# M3-212-LAT



- · LC Type (2×5 Small Form Factor) · Supports 2.125Gbps data
- transfer rate for Fibre Channel · Link length: 150m(62.5<sub>um</sub>)/300m(50<sub>um</sub>) Output termination: AC
- · Duplex LC connector
- · Excellent performance optical jitter
- · Low EMI / Metal Case
- Power supply: Both uses for +3.3V and +5.0V
- Operating temperature:0℃ to +70℃
- · SD out type: TTL

# **LC Small Form Factor Pluggable**

# M3-125-PAT



#### · LC Type(Small Form Factor Pluggable) · Low EMI / Metal Case · Supports 1.25Gbps data

- transfer rate for Gigabit Ethernet · Link length: 275m(62.5um)/550m(50um) · Output termination: AC
- · Duplex LC connector
- · Excellent performance optical jitter
- · Power supply: +3.3V
- Operating temperature: 0°C to +70°C
- · SD out type: TTL

# M3-250-PAT



- · LC Type(Small Form Factor Pluggable) · Low EMI / Metal Case · Supports 2.5Gbps data
- transfer rate for Gigabit Ethernet
- · Duplex LC connector
- · Excellent performance optical jitter
- · Power supply:+3.3V
- Operating temperature : 0°C to +70°C
- · Link length: 125m(62.5um)/250m(50um) · Output termination: AC
  - · SD out type: TTL



# **Ordering code**

## M3-AAA-BCD

AAA (Data Transfer Rate): 125(1.25Gbps) / 106(1.0625Gbps)/250(2.5Gbps)/212(2.125Gbps) Gbit Ethernet or Infiniband: 125(1.25Gbps)/250(2.5Gbps) Fiber Channel: 106 (1.0625Gbps)/212 (2.125Gbps) B(Connector Type): S-SC/L-LC/P-SFP

C(Receiver Termination): A-AC/D-DC

D(Signal Detect Out): P-PECL/T-TTL

Where in case of SFF and SFP, AC termination and TTL signal detect out are only available.

# Example: M3-125-SAP



# **SC Full Form Factor**

## M3-125-SXX



- · SC Type (1 × 9 Full Form Factor) · Supports 1.25Gbps data
- transfer rate for Gigabit Ethernet
- · Duplex SC connector
- · Excellent performance optical jitter

· Low EMI / Metal Case

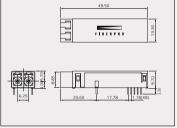
- Power supply: Both uses for +3.3V and +5.0V
- Operating temperature:0°C to +70°C
- · Link length:275m(62.5um)/550m(50um) · XX Options : SD out type PECL / TTL Output termination : AC / DC

## M3-106-SXX



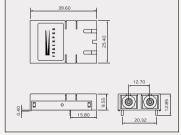
- · SC Type (1 × 9 Full Form Factor) · Supports 1.0625Gbps data
- transfer rate for Gigabit Ethernet
- · Link length: 300m(62.5 m)/500m(50 m) · XX Options : SD out type PECL / TTL · Duplex SC connector
- · Excellent performance optical iitter
- · Low EMI / Metal Case
- Power supply:Both uses for +3.3V and +5.0V
- Operating temperature:0°C to +70°C
  - Output termination : AC / DC

# **Dimensions**





8.6 LC Small Form Factor Pluggable



**SC Full Form Factor** 

### YOUR INNOVATIVE FIBER OPTICS PROVIDER





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