

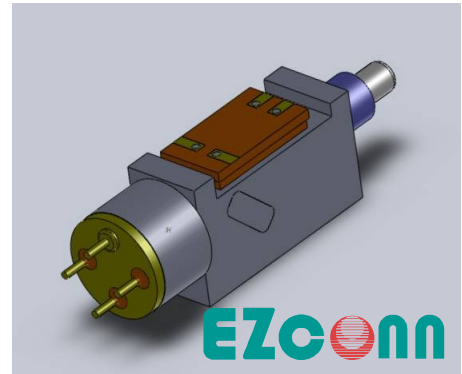
Compact-BIDI®¹

Next Generation Bi-Directional Optical Module

Product brief

EZconn presents a new family of optical components for two-way communication over a single fiber. The costs of bi-directional optical components have dropped to a level, where the assembly cost for the PCB becomes a major share of the total cost of ownership. The Compact-BIDI® eliminate the space, eliminate need for Rx pin bending, eliminates fiber handling during PCB assembly, thus significantly reducing assembly costs. The Compact-BIDI® could help to double the density of the original linecard in form factor optical transceivers. In order to ease design in, the electro-optical characteristics remain similar to our long proven BIDI®-family.

The bi-directional Compact-BIDI® module consists of a laser and a PIN diode with optional pre-amplifier. The emitter of the Compact-BIDI® is placed in hermetically sealed TO can and is located on the side of the module. The receiver of the Compact-BIDI® is placed in hermetically sealed special ceramic sub-mount and is located on the side of the module. This makes the module easy mountable on the PCB or FPC without pin bending procedure. Different laser types are available as well as receiver models with integrated low-noise pre-amplifier. The standard version of the Compact-BIDI® features an LC receptacle. The single fiber concept saves overall system costs by eliminating the costs of one fiber, allows for doubling of capacity, and eases fiber management.



Features

- Small size suitable for Compact small form factor
- Easy mounting and wave soldering
- Single fiber full duplex solution
- Double the ports with current SFF/SFP form factor
- Data rates up to 2.5 Gbps
- Direct modulated 1310/1490nm FP or DFB Lasers
- Integrated Trans-Impedance Amplifier for low noise amplification
- Integrated WDM filter for 1310/1490 nm wavelength upstream and 1490/1310 nm wavelength downstream transmission
- Operating temperature -40..+85 °C

Applications

- Compact SFF, Compact SFP transceivers
- Access Networks, e.g. Media converter for Fiber-In-The-Loop (FITL), Passive Optical Networks (PON) and Point-to-Point Networks (P2P)
- Intra-Office communication between Switches, Add/Drop Multiplexers (ADM), Cross Connects, Routers, Servers etc.

¹BIDI® is a registered trademark of EZconn
Symbolic picture only – the actual pin layout may be different