

# IP-QELK10(20)F34(B43)CBD

SFP BIDI 1.25Gb/s TX1310nmFP/RX1490nm(TX1490nmDFB/RX1310nm) 10(20)km DDM

## PRODUCT FEATURES

- Up to 1.25Gb/s data links
- 1310nm FP laser transmitter and PIN/TIA  
Receiver for IP-QELK10(20)F34CBD
- 1490nm DFB laser transmitter and PIN/TIA  
Receiver for IP-QELK10(20)B43CBD
- Up to 10(20)km on 9/125μm SMF
- Hot-pluggable SFP footprint
- BIDILC/UPC type pluggable optical interface
- Low power dissipation
- Metal enclosure, for lower EMI
- RoHS compliant and lead-free
- Support Digital Diagnostic Monitor interface
- Single +3.3V power supply
- Compliant with SFF-8472
- Case operating temperature

Commercial: 0°C to +70°C



## APPLICATIONS

- Switch to Switch Interface
- Fast Ethernet
- Switched Backplane Applications
- Router/Server Interface
- Other Optical Links

## Compliance

- SFP MSA
- SFF-8472
- IEEE802.3z
- RoHS

## PRODUCT DESCRIPTION

IP-QELK10(20)F34(B43)CBD Small Form Factor Pluggable (SFP) transceivers are compatible with the Small Form Factor Pluggable Multi-Sourcing Agreement (MSA). The transceiver consists of five sections: the LD driver, the limiting amplifier, the digital diagnostic monitor, the 1310nm FP laser (the 1490nm DFB laser) and the PIN/TIA. The module data link up to 20km in 9/125um Single-mode fiber.

This transceiver meets the Small Form Pluggable (SFP) industry standard package utilizing an integral LC-Bi-directional optical interface connector. An enhanced Digital Diagnostic Monitoring Interface compliant with SFF-8472 has been incorporated into the transceiver. It allows real time access to the transceiver operating parameters such as transceiver temperature, laser bias current, transmitted optical power, received optical power and transceiver supply voltage by reading a built-in memory with I2C interface.

The optical output can be disabled by a LVTTTL logic high-level input of Tx Disable, and the system also can disable the module via I2C. Tx Fault is provided to indicate that degradation of the laser. Loss of signal(LOS) output is provided to indicate the loss of an input optical signal of receiver or the link status with partner. The system can also get the LOS(or Link)/Disable/Fault information via I2C register access.

## I. Contact Information

InphilightCo.,Ltd

Building 5, Zone E, Guangguxin Center, No.52, Road liufang, Jiangxia district, Wuhan, Hubei, China

If you need more details about datasheet, please contact sales

[sales@inphilight.com](mailto:sales@inphilight.com)

## Revision History

| Version No. | Date          | Description           |
|-------------|---------------|-----------------------|
| 1.0         | June 24, 2019 | Preliminary datasheet |