

## OPTICAL MODULES • SFP TRANSCEIVER

## ALMOD-MGLHX40-D

1000Base-LHX SFP Module (SM, 40Km)

The Antek Labs ALMOD-MGLHX40-D is a hot-pluggable SFP optical transceiver compliant with the SFP MSA and SFF-8472 Digital Diagnostic Monitoring interface. 1000Base-LHX SFP Module (SM, 40Km). It provides full DDM telemetry, Class-1 laser safety and low power consumption for switches, media converters, routers and server interfaces.

## KEY FEATURES

- Hot-pluggable SFP form factor, compliant with SFP MSA and SFF-8472.
- Digital Diagnostic Monitoring (DDM) — optical power, temperature, voltage and bias telemetry.
- Class-1 laser safety; low EMI and excellent ESD protection.
- Low power consumption (< 1 W); compatible with Antek and standard SFP host ports.

## GENERAL

|                 |                                    |
|-----------------|------------------------------------|
| Type            | 1000Base-LHX SFP Module (SM, 40Km) |
| Data rate       | 1.25Gbps/1.0625Gbps                |
| Form factor     | SFP / SFP+ (hot-pluggable, MSA)    |
| Connector       | Duplex LC                          |
| Fiber / media   | Single-mode                        |
| Wavelength (Tx) | 1270–1360 nm (typ 1310 nm)         |

## TRANSMITTER

|                      |                                   |
|----------------------|-----------------------------------|
| Average output power | -9 to -3 dBm                      |
| Extinction ratio     | 9 dB (min)                        |
| RMS spectral width   | 0.65 nm (max, RMS)                |
| Laser / safety       | FP/DFB laser, Class 1 (IEC 60825) |

## RECEIVER

|                      |                         |
|----------------------|-------------------------|
| Receiver sensitivity | ≤ -22 dBm               |
| Input overload       | ≥ -3 dBm                |
| Detector             | PIN photodiode with TIA |

## ELECTRICAL &amp; DIAGNOSTICS

|                   |                                        |
|-------------------|----------------------------------------|
| Supply voltage    | 3.3 V (3.13–3.47 V)                    |
| Supply current    | 220 mA (max)                           |
| Power consumption | < 1 W                                  |
| DDM               | SFF-8472 Digital Diagnostic Monitoring |

|            |                                                           |
|------------|-----------------------------------------------------------|
| Compliance | SFP MSA, SFF-8472; IEEE 802.3z / 802.3ae (rate-dependent) |
|------------|-----------------------------------------------------------|

**ENVIRONMENTAL**

|                       |                |
|-----------------------|----------------|
| Operating temperature | 0~+70°C        |
| Storage temperature   | -40 C to +85 C |

**WARRANTY**

|          |                          |
|----------|--------------------------|
| Warranty | 1 year, lifetime support |
|----------|--------------------------|

**ORDERING INFORMATION**

**ALMOD-MGLHX40-D** 1000Base-LHX SFP Module (SM, 40Km).

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