

# CD-4000 Clock data recovery

OPTICAL/ELECTRICAL CDR BOX FOR 28/56 GBd



Efficient CDR solution for the production line.

## KEY FEATURES

Supports NRZ and PAM4 signals

Integrated O/E with optical splitter (optional)

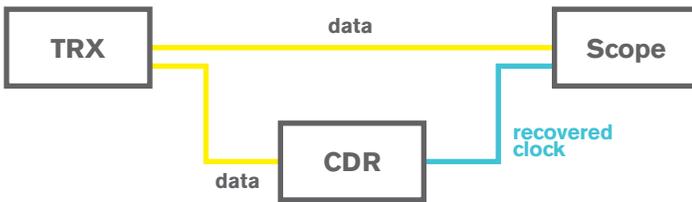
Ultra low random jitter

Auto-locking

SPEC SHEET

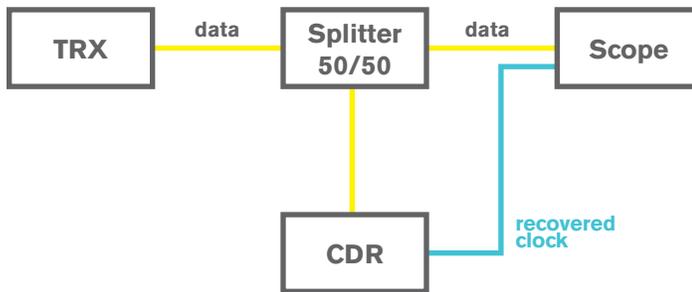
## TEST CONFIGURATIONS OF 53G TRANSCEIVER

### 1 400GBASE-DR4 400GBASE-FR4



Test pattern: PRBS7Q to PRBS16Q and SSPRQ.

### 2 100GBASE-DR1 100GBASE-FR1



Test pattern: PRBS7Q to PRBS16Q.

Test pattern: limited support for SSPRQ.

## SPECIFICATIONS

All specifications are typical at 23 °C ± 2 °C unless otherwise specified.

### OPTICAL SPECIFICATIONS

Symbol rate (GBd)	25 - 56 (depends on model)
Wavelength (nm)	1250 - 1650
Return loss (dB)	-30 (at 1310/1550 nm)
Input sensitivity (dBm)	-5 (at 1310/1550 nm)
Damage power (mW)	5
Connector type	FC/PC (9/125 μm)
Loop bandwidth (MHz)	20
Clock output ratio	/8 for 53G, 56G /4 for 26G, 28G
Recovered clock random jitter (fs)	< 290 (0 dBm, PRBS16Q at 53 GBd)
Clock output amplitude (mV)	400 (typical)

## ELECTRICAL SPECIFICATIONS

Symbol rate (GBd)	25 - 56
Bandwidth (GHz)	25.6 - 31.9
Return loss (dB)	-30
Input amplitude (mV <sub>ppd</sub> )	350 - 550
Connector type	2.92 mm (K)
Loop bandwidth (MHz)	20
Clock output ratio	/8 for 53G, 56G /4 for 26G, 28G
Recovered clock random jitter (fs)	<50

## GENERAL SPECIFICATIONS

Size (H x W x D)	103 mm x 442 mm x 300 mm (4.1 in x 17.4 in x 11.8 in)
Weight	≤10 kg (22 lb)
Temperature	Operating: 5 °C to 40 °C (41 °F to 104 °F) Storage: -20 °C to 70 °C (-4 °F to 158 °F)
Relative humidity	20% to 80%
Power <sup>a</sup>	100/120 Vac (50/60/400 Hz) 220/240 Vac (50/60 Hz) 60 W typical/80 W max.
Access interface	Gigabit Ethernet (RJ45 port)

a. Operate with supply voltage fluctuations up to ±10 % of the nominal voltage.

## ORDERING INFORMATION

CD-4000-XX-XX

**Model**

56-O = 28 GBd/56 GBd optical CDR box  
56-E = 28 GBd/56 GBd electrical CDR box

**Options**

50S = Built-in 50/50 splitter  
80S = Built-in 80/20 splitter

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