

CCM 1000

Features

- 8-channel Contact Closure Module
- Fail-safe
- Adjustment-free installation and operation
- Potential-free contacts
- Rack-mount and stand-alone



Description

The CCM 1000 series transports eight telemetry contacts unidirectionally over one multimode optical fiber.

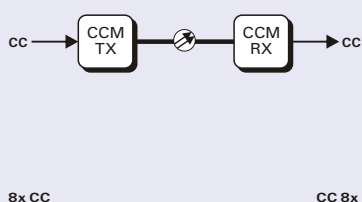
The CCM is monitored by status LEDs indicating the link condition and its internal synchronization. The contact closures are designed to be fail-safe: they will fall back to 'open' in case of data failure, connection loss or power loss.

Ordering information

Model	Description	Fiber type	Wavelength(s)	Budget	Housing	Managed
CCM 1010 TX CCM 1010 RX	8-channel contact-closure transmitter 8-channel contact-closure receiver	MM	850 nm	28 dB ¹	rack-mount	-
CCM 10xx/SA	Stand-alone versions of rack-mount models				stand-alone	-

¹): For 50/125 μ fiber subtract 4 dB.

Applications



Technical Specifications

Contact Closure

Number of channels	8 (simplex)
Input	+ 5 V pull-up, 10 k Ω
Threshold	4.3 V (< 1.5 k Ω)
Output	Fail-safe, potential-free
Switch rating	2 A at 30 Vdc
Connector type	D37

Powering

Power consumption	1.2 W
Rack-mount units	MC 10 and MC 11 power-supply cabinets
Stand-alone units (/SA)	11 to 16 Vdc (PSA 12 DC, PSA 12 DC/25 or PSR 12 DC)

Management

LED status indicators	
DC	Power-on indicator (green)
SYNC	RX only: Link synchronized (green), link down (red)
FR	TX only: Correct transmission framing (green), internal failure (red)

Environmental

Operating temperature	-40 to +74°C
Relative humidity	< 95% (no condensation)
MTBF	> 100,000 h
Safety & EMC	IEC/EN 60950, IEC/EN 60825, IEC/EN 61000 EN 50130-4, EN 50081-1, IEC/EN 55022, FCC-15

Mechanical

Dimensions (h \times w \times d)	128 x 35 x 190 mm
Weight (approximately)	450 g
Housing	Rack-mount or stand-alone

Optical	CCM 1010 TX - RX	CCM 1050 TX - RX			
Fiber type	1x MM	1x SM			
System budget	28 dB ¹	> 40 dB			
Min. link loss	0 dB	0 dB			
Output power	> -17 dBm ¹	> -5 dBm			
Output wavelength	850 nm	1310 nm			
Input sensitivity	< -45 dBm	< -45 dBm			
Connector type	ST	FC			

¹): For 50/125 μ fiber subtract 4 dB.

