

# TB842

## ABB Ability™ System 800xA® hardware selector



TB842 ModuleBus Optical Port is a communication interface between the CI801 or CI840/CI840A FCI and the TB820/TB820V2/TB840/TB840A ModuleBus modem of an I/O cluster or ABB drives units via the Optical ModuleBus. TB842 connects to CI801 via TB806 and to CI840/CI840A via TU847 and TB806 for single I/O or via TU846 and TB846 for redundant I/O.

TB842 can be used in both a simplex optical configuration as well as in a duplex optical configuration. In a simplex configuration, the optical ModuleBus nodes are connected in a ring. In a duplex configuration, the optical ModuleBus nodes are connected in a row. TB842 has a connector for fiber optic connections and a connection to the communication interface module.

The module is equipped with a Transmitter/Receiver for up to 10 Mbit/s. Both plastic and HCS (Hard Clad Silica) optic fiber with connectors (Agilent's, former Hewlett-Packard, Versatile Link) can be used with the TB842. A Modulebus must have the same type of transmitter/receiver on each node.

### Features and benefits

- 1 fiber optic port for the Optical ModuleBus expansion
- Connection to CI801 and CI840/CI840A

More info

Opto Cable for TB842 according to HP.

Plastic Optical Fiber (POF) (TK811V... or TK812V...) up to 15 meters.

- Extra low loss attenuation
- Simplex or duplex cable
- Latching simplex or duplex connector.
- Cable attenuation maximum 4 dB Hard Clad Silica (HCS) fiber up to 200 meters.
- Riser or plenum
- Simplex or duplex cable
- Latching simplex or duplex connector
- Cable attenuation maximum 2 dB

General info	
Article number	3BSE022464R1
Communication protocol	Modulebus
Master or slave	N/A
Line redundancy	Yes
Module redundancy	Yes
Hot Swap	Yes
Used together with HI Controller	No
Mounting	Vertical or Horizontal

Detailed data	
Connector	Agilent's, former Hewlett-Packard, Versatile Link
24 V consumption typ.	20 mA
ModuleBus current distribution	Fiber optic interface, one transmit and one receive connection for max. 10 Mbit/s. Wavelength 650 nm
Power dissipation	0.5 W

Environment and certification	
CE-marking	Yes
Electrical Safety	EN 61010-1, UL 61010-1, EN 61010-2-201, UL 61010-2-201
Hazardous location	cULus Hazardous Location Class1 Zone 2, ATEX Zone 2
Marine certificates	ABS, BV, DNV-GL, LR
Temperature, Operating	0 to +55 °C (+32 to +131 °F), approvals are issued for +5 to +55 °C
Temperature, Storage	-40 to +70 °C (-40 to +158 °F)
Relative humidity	5 to 95 %, non-condensing
Max ambient temperature	55 °C (131 °F), for vertical mounting 40 °C (104 °F)
Equipment class	Class I according to IEC 60536; (earth protected)
Ingress protection	IP20 according to IEC 60529
RoHS compliance	DIRECTIVE/2011/65/EU (EN 50581:2012)
WEEE compliance	DIRECTIVE/2012/19/EU

Dimensions	
Width	17.6 mm (0.69")
Height	56.7 mm (2.23")
Depth	42.3 mm (1.67")
Weight	90 g (0.20 lbs.)

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