



## Rugged Data Diode 50-800 series

Fibersystem rugged Data Diodes are designed to operate in extremely harsh environments and conditions. Enables unidirectional transfer of data over fibercable between two networks with hardware separation to guarantee security.

### Fibersystem Data Diode advantages

- One-way connection between two networks (also known as Simplex).
- Based on hardware. No physical risk of sending data in false direction.
- The datalines are physically cut/interrupted on circuit board. This completely eliminates the risk for data flowing in false direction.
- Fiberoptical links for galvanic separation between networks.
- All data will be transparently forwarded.
- UDP and SNTP support.

### Versions of rugged Data Diode

- 100 Mbit/s or 1000 Mbit/s
- Optional TEMPEST Level A/ EMSEC/ RÖS U1

### Accessories

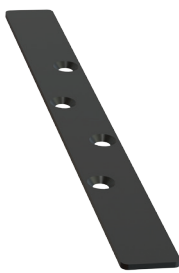
- 1HU Mounting Bracket (a)
- Adapter plate for other Rugged devices (b)
- Adapter plate for Fibersystem Rugged devices (c)



(a)



(b)



(c)



## Features 50-800 Rugged Data Diode

- **Low pressure operation** according to MIL-STD 810G test method 500.5 Procedure-I type B airtransport storage and for operation procedure -II type a)
- **High temperature operation** according to MIL-STD 810G test method 501.5 Procedure -I (operation) level Hot dry +70°C and procedure-III (storage) Hot/dry (+71°C)
- **Low temperature operation** according to MIL-STD 810G test method 502.5 Procedure -I (Storage) Cold (C2)-46°C and procedure -II(operation) Cold (C2)-40°C
- **Rain operation** according to MIL-STD 810G test method 506.5 Rain 506.4-I Outdoor, -II indoor with drop
- **Humidity operation** according to MIL-STD 810G test method 507.4 procedure -I High RH (B2) 6 cycles
- **Salt fog operation** according to MIL-STD810G test method 509.5 with 5% concentration for 7 days
- **Vibrations operation** according to MIL-STD 810G test method 514.5 procedure-I and -II Operation category 14 and 20; transport category 4,5 and 10. (Shock 40g@11ms, Chock 75g@6ms)
- **Shock operation** according to MIL-STD 810G method 516.6 procedure -I (functional test for ground equipment) 3 shocks in each 6 directions
- **Water protected** according to IPX5
- **Dust protected** according to IP4X
- **EMC protected** according to MIL-STD 461F method; RE 101, RE102 level Navy Mobile & Army and CE102 level Basic curve
- **EMI protected** according to MIL-STD 461F method: CE 101, RS103 level Army; CS101 level Curve#1; CS114 level Army; CS115 level Army and CS116 level Army

Fiber optic links	Data speed	Fiber	Wavelength	Typical distance
	1 Gbps	1000 Base-SX	850nm	220m Multimode 62.5/125um
	1 Gbps	1000 Base-LX	1310nm	500m Multimode 50/125um
	100 Mbps	100 Base-FX	1310nm	5km Singlemode 10/125um
				2km Multimode 50/125um and 62.5/125um

## Environmental

Temperature range -40 to + 70°C

## Power Supply

DC 10-32VDC, Max 10W. (Optional 18-75VDC)  
DC-connector 3 pin

## Power Consumption

2.5W

## CE

Compliance EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN55022  
Safety EN 60950

## MIL Standard

MIL-STD 810G, MIL-STD 461F (Only 660-00-7131, 60-00-7132, 60-00-7133, 60-00-7134)

## RÖS U1/TEMPEST Level A

Class SS1 (Only 60-00-7132, 60-00-7444, 60-00-7133, 60-00-7446)

## Dimensions and Weight

Physical size 44 (H), 110 (W), 227 (D) mm / 1.7 (H), 4.3 (W), 8.9 (D) inch 1 HU high and ¼ 19 inch wide  
Weight 1.4 kg / 3.09 lbs

## Rugged Data Diodes

Product number	Model	M-Number	Description	Mbit/s	Wave length	In	Out	MM/SM
60-00-7131	50-800	M3196-655310	Data Diode Rugged 1Gbit	1000	850	LC	LC	MM
60-00-7444	50-800		Data Diode Rugged 1Gbit SS1 (TEMPEST Level A/EMSEC/RÖS U1)	1000	1310	LC	LC	SM
60-00-7132	50-800	M3196-655210	Data Diode Rugged 1Gbit SS1 (TEMPEST Level A/EMSEC/RÖS U1)	1000	850	LC	LC	MM
60-00-7445	50-800		Data Diode Rugged 1Gbit 1310nm	1000	1310	LC	LC	SM
60-00-7134	50-800	M3196-655010	Data Diode Rugged 100Mbit	100	1310	LC	LC	MM
60-00-7446	50-800		Data Diode Rugged 100Mbit SS1 (TEMPEST Level A/EMSEC/RÖS U1)	100	1310	LC	LC	SM
60-00-7133	50-800	M3196-655110	Data Diode Rugged 100Mbit SS1 (TEMPEST Level A/EMSEC/RÖS U1)	100	1310	LC	LC	MM
60-00-7447	50-800		Data Diode Rugged 100Mbit 1310nm	100	1310	LC	LC	SM

## Accessories

Product number	Model	M-Number	Description
60-00-7233	50-800		1HU Mounting Bracket for Fibersystem Rugged devices (one pair with screws)
60-00-7114	50-800		Adapter plate for other Rugged devices
60-00-7113	50-800		Adapter plate for 19 inch rack

This brochure may be subject to change without prior notice.