

**Fibersystems
Data Diodes supports:**

Syslog
NTP Broadcast
SNMP Traps
UDP Unicast
UDP Broadcast
UDP Multicast

**No extra software
needed!**



Data Diodes 50-800 Series

Data Diodes are used to allow secure networks to receive data from open/general purpose networks.

Unidirectional transfer of data over fiber cable or copper cable between two networks with hardware separation to guarantee security.

This completely eliminates the risk for data flowing in false direction.

Fiber or Copper interface can be chosen independantly for In and Out. No need for extra converter!

The Fibersystem Data Diodes communication gives the following advantages

- One-way connection between two networks (also known as Simplex)
- Based on hardware, no extra software needed. This completely eliminates the risk for data flowing in false direction
- Fiberoptical links for galvanic separation between networks
- Can be used in any ethernet application using fiber or copper connectivity
- All data will be transparently forwarded
- Ethernet and or Fiber based
- Supports: Syslog, NTP Broadcast, SNMP traps
- Supports: UDP (Unicast, Broadcast, Multicast, Manycast, see page 4)
- For Queue Mgmt, Logging, Mail, FTP, SNMP and SDK. Additional software is needed.

Card Modules Secure (60-00-7303, 60-00-7304, 60-00-8362, 60-00-8363)

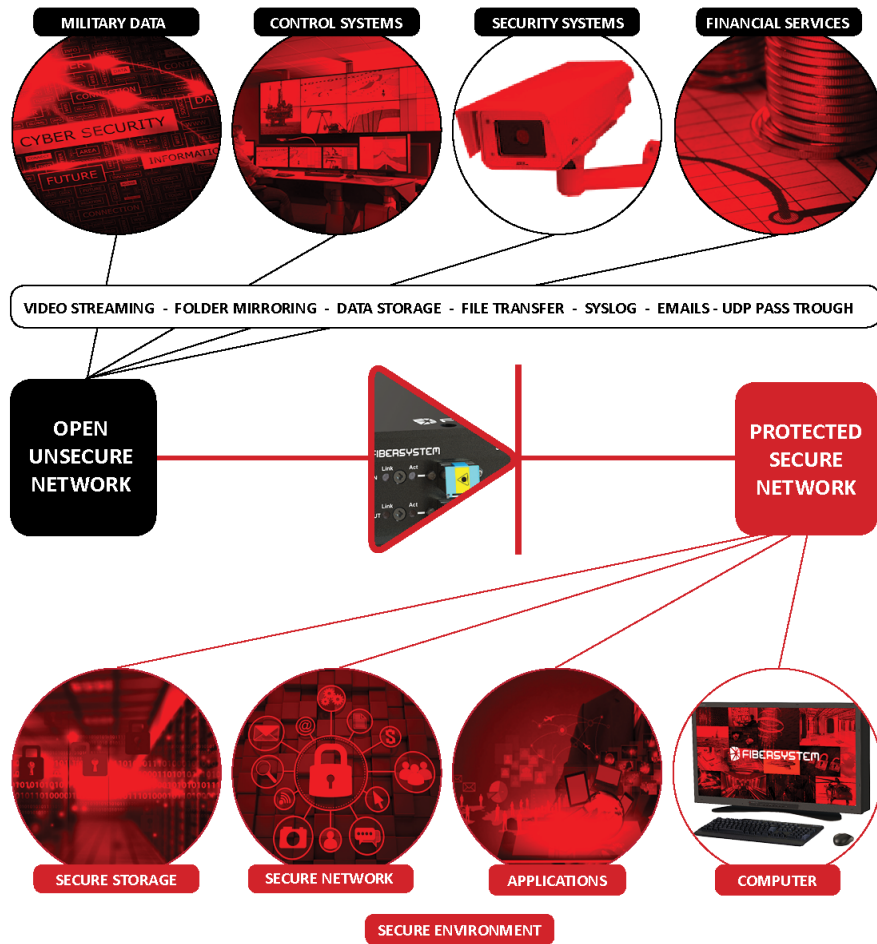
- Tamper proof enclosure
- Riveted and sealed enclosure by default for assurance
- EMC and back channel protected in hardware design
- No crosstalk
- Multiple unidirectional barriers
- The Rack Modules can be integrated in your existing solution/ product

Versions

- Rack Module Secure, Rack Module and Rack Module DIN-mount
- 100Mbit or 1Gbit
- Tempest Level A, EMSEC, RÖS U1 (also see separate Datasheet Data Diodes Rugged)
- Rugged (see separate Datasheet Data Diodes Rugged)
- Bidirectional (see separate Datasheet Data Diode Bidirectional)
- Integrated (see separate Datasheet Data Diodes Integrated)

Accessories for Card Modules

- Fibersystem 19" Rack System, 3HU with 2x150W redundant powersupplies, 16 rack slots
- Fibersystem Single Slot Unit
- Rack shelf 19" 1HU, 3 rack slots



Secure File Transfer (additional software needed)

Transfer files from one network to another with no the risk of sending information in the opposite direction.

Secure Plant Monitoring (additional software needed)

Send continues plant monitoring information from Production Network to Corporate Network securely.

Secure CCTV Recordings (additional software needed)

Ensure integrity of CCTV recordings by sending the unprocessed camera stream to safe storage and keep the network safe from hijackers trying to connect to the company network through the CCTV Camera wire.

Information Management

Control direction of information streams in your network.

Isolate secret networks

Create working Isolated secret networks with necessary input sent unidirectional from Open/Unclassified networks.

Distribute NTP to secret networks

Securely distribute and synchronize NTP in secret networks.

Flexibility

The Data Diode Modules can be used in our:

- Single Slot Unit (1)
- Rack System (2)



Fibersystem Data Diodes Card Module

- Several versions; Fiber/copper connectivity, 100Mbit or 1Gbit, Tempest Level A/ RÖS U1, Multimode or Singlemode
- Intended to be used in the Fibersystem 19" Rack System or in the Single Slot Unit
- 16pcs fits into the Fibersystem 19" Rack System



Fibersystem Single Slot Unit

- Single Slot Unit for Fibersystem Card Modules
- Built in Power Supply

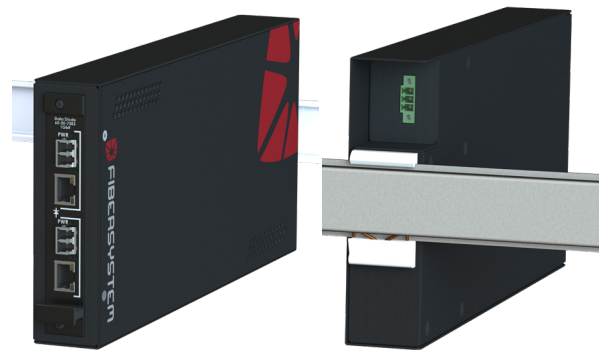
For more information, see Rack System 50-502 Datasheet



Fibersystem Single Slot Unit DIN-mount

- Single Slot Unit for Fibersystem Card Modules
- For DIN-mount
- Built in Power Supply (9-36VDC)

For more information, see Rack System 50-502 Datasheet



Fibersystem 19" Rack System

- Redundant Power Supplies
- 16 rack slot
- 3 HU high
- Hot swap of power and card modules



Optional

- QNX RealTime OS version 6.5.0
- HTTP-based (Web-browser) interface for configuration/administration
- RTC (real time clock) support
- NTP (NetworkTimeProtocol) support
- SNMPv2 (SNMPv1 compatible) and Web 2.0 (json)
- Interface for access of sensor data
- Logging
- Syslog
- I2C bus enabled for:
 - Fan speed
 - Current
 - Voltage
 - Temperature (three locations on the back-plane)
 - Card module slot state (Unoccupied/Occupied/Power error)

For more information, see Rack System 50-502 Datasheet

Data Diodes Rack Module

Galvanic/Electrical link	
Data speed	100Mbit or 1Gbit depending on model
Media	100BaseTX, 100BaseFX, 1000BaseTx or 1000BaseSX
Fiber optic links	
Data speed	100Mbit or 1Gbit depending on model
Media	100BaseFX or 1000BaseSX depending on model
Wavelength	850nm
Fiber optical connector	LC
Fiber	Multimode 50/125µm or 62.5/125µm
Optical system budget	13dB in 62.5/125µm. 9dB in 50/125µm fiber
Typical distance	0-2km (3dB system margin for 50/125µm, 6dB for 62.5/125µm)
Environmental	
Temperature range	Operating, 0 to +50C. Storage, -40C to +70C
Relative humidity	Operating, 5 to 95% . Storage, 5 to 95% non condensing
Regulatory compliance	
Safety	CE
Environmental	Complies with appropriate requirements of RoHs and WEEE
Dimensions and Weight	
Physical size	115(H), 20(W), 195(D)mm / 4.5(H), 0.8(W), 7.7 (D)inch
Weight	0.15kg / 0.33lbs

Ordering information

Data Diodes Rack Module Secure

Partnumber	Model	M-Number	Description	In	Out
60-00-7303	50-800	M3196-661110	Data Diode Rack Module Secure 1Gbit Multimode (Tempest Level A/ RÖS U1)	RJ45 / LC	RJ45 / LC
60-00-7304	50-800	M3196-661010	Data Diode Rack Module Secure 100Mbit Multimode	RJ45 / LC	RJ45 / LC
60-00-8362	50-800		Data Diode Card Module Secure 1Gbit Singlemode	RJ45 / LC	RJ45 / LC
60-00-8363	50-800		Data Diode Card Module Secure 100Mbit Singlemode	RJ45 / LC	RJ45 / LC

Data Diodes Rack Module

Partnumber	Model	M-Number	Description	In	Out
60-00-6615	50-813	F3785-000088	Data Diode Rack Module 100BaseTX to 100BaseFX LC Multimode	RJ45	LC
60-00-6618	50-814	F3785-000089	Data Diode Rack Module 100BaseFX LC to 100BaseTX Multimode	LC	RJ45
60-00-7230	50-824	M3196-657010	Data Diode Rack Module 100BaseTX to 100BaseTX	RJ45	RJ45
60-00-6659	50-815	F3785-000092	Data Diode Rack Module 1000BaseTX/ 1000BaseSX LC to 1000BaseTX Multimode	RJ45 / LC	RJ45
60-00-6901	50-816	M3196-500710	Data Diode Rack Module 1000BaseTX / 1000BaseSX LC to 1000BaseSX LC Multimode	RJ45 / LC	LC
60-00-6902	50-817	M3196-500810	Data Diode Rack Module 1000BaseSX LC to 1000BaseT / 1000BaseSX LC Multimode	LC	RJ45/LC

19" Rack Solution and One Slot Casing

Partnumber	Model	M-Number	Description
60-00-6918	50-502	M3196-001800	Rack 19" 3HU with 2x150W redundant powersupplies,16 card slots, with SNMP
60-00-6944	50-502	M3196-992819	Rack 19" 3HU with 2x150W redundant powersupplies,16 card slots, without SNMP
60-00-6406	50-502	F3785-000080	Single Slot Unit with built in 15W power 85 AC - 264VAC, 47-63Hz
60-00-7231	50-502	M3196-993219	Single Slot Unit with built in 15W power. 24VDC (nom 9-36)
60-00-7480	50-502		Single Slot Unit DIN-mount with built in 15W power. 24VDC (nom 9-36)
60-00-6505	50-502	F3785-000084	Rack shelf 19" 1HU, 3 card slots