

Data Diode

Unrivalled Security

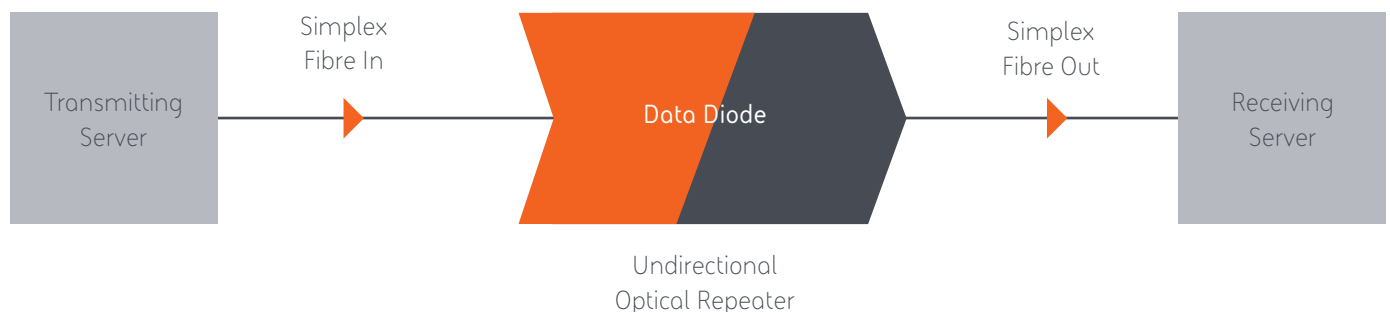
What is a Data Diode?

The BAE Systems Data Diode is a hardware product providing the security enforcing function of a Cross Domain Solution. It enables the secure unidirectional transfer of data between networks by channelling data through a hardware pipeline that prevents reverse flow.



How does it work?

The Data Diode functions as a simple unidirectional fibre-optic repeater – the signal received via the IN port on the Data Diode is retransmitted via the OUT port. Electronic components within the unit ensure that signals can pass only from input to output, and not vice versa.



To facilitate the transfer of data across a Data Diode, BAE Systems provides a suite of **Data Pump Applications**. These applications are installed on servers which reside on either side of the Data Diode, connected to the device via simplex fibre-optic cable.

Certifications

The BAE Systems Data Diode family bears the following security certifications:

- Common Criteria (CC) **EAL7+** (applicable to 100Mb/1Gb variants only)
- Unified Cross Domain Services Management Office (**UCDSMO**) Baseline (applicable to 100Mb/1Gb variants only)
- Australian Signals Directorate High Assurance

Technical Specifications

Data Rate	100Mbps	1 Gbps	10 Gbps
Wavelength	1300 nm	850 nm	850 nm
Dimensions	50 (H) x 120 (W) x 170 (L) mm (requires 2 standard server rack units)		
Weight	Unpacked: 1kg Packed 2kg		
Temperature	Operating: 5°C to 40°C Storage: -20°C to 70°		
Humidity	Operating: 10% to 90% non-condensing Storage: 10% to 95% non-condensing		
Data Diode Input Voltage	5.0V DC, 0.7A		
Power Supply Unit	Input: 100-240V AC, 50-60Hz, 0.3A Output: 5V DC, 2.5A		
Safety and Compliance	EMI/EMC	<ul style="list-style-type: none"> - AS/NZS 3548 +A1, A2 Class B Emissions (100Mbps) - AS/NZS CISPR 22 Class B Emissions (1Gbps, 10Gbps) - EN55022 Class B Emissions - EN55024 Immunity - FCC Part 15 Class B Emissions 	
	Electrical	<ul style="list-style-type: none"> - IEC 60950-1 (incl. AU, CA, US & EU Group National Deviations under the CB scheme) 	
	Optical	<ul style="list-style-type: none"> - US FDA CDRH Class I AEL - IEC 60825-1, 2 - EN 60825-1 (+All) 	
Connections	Standard	IEEE 802.3	
	Connectors	1 x Receive, 1 x transmit	
	100Mbps	OM1 multimode fibre optic cable terminated with an ST style connector	
	1Gbps; 10Gbps	OM3 multimode fibre optic cable terminated with an LC style connector	

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