

The SecuriCDS® DD1000i is a data diode appliance that enables unidirectional data flow and physical network separation using optical technology. The DD1000i has built-in proxy software from Advenica designed to support a wide range of use cases across various industries and needs.



Main benefits

- Data diode with optical separation and proxy servers in one appliance
- Growing library of software services for use cases such as file transfer and log export
- Intuitive tools for administration and device management
- Support for failover
- National approval for security levels up to and including HEMLIG/TOP SECRET

One appliance for every use case

The Advenica SecuriCDS® DD1000i provides network separation using optical technology and has built-in support for all typical data diode applications in one appliance.

Packaged in a compact 1U 19" rack form factor with integrated proxy servers it offers all you need for the highest level of data protection available in the market.

Streamlined integration

Our own tailor-made proxy software runs on each side of the data diode, handling all bidirectional communication between sending and receiving systems.

A broad range of Data Diode Services are available as add-ons, providing complete unidirectional solutions for domain-specific use cases.

Hardware-enforced one-way data flow

The SecuriCDS® DD1000i meets the highest demands on both security and assurance. The unidirectional data flow is guaranteed by a separate hardware component isolated from the integrated proxies.

Special attention has been given to eliminate the risk of covert channels in the reverse direction.

Trusted in high-security domains

The SecuriCDS DD1000i is approved in Sweden for data transfer between networks of different security levels up to and including the level of HEMLIG/KVALIFICERAT HEMLIG i.e. SECRET/TOP SECRET.

Technical specification

Model characteristics

Device type	Data diode with built-in proxy servers
Installation	Rack mount (1U in a 19" rack system)
Administration	Web interface (HTTPS) for device administration
Monitoring	Syslog and SNMP support
Performance	1 Gbps network interfaces Built-in error correction (configurable)
Supported applications (protocols)	Data transfer (UDP, TCP), File transfer (SFTP, SMB, NFS), Log export (Syslog), Email transfer (SMTP), Time export/import (NTP), HTTP transfer (HTTP/HTTPS), OT/IT (OPC UA, OPC UA to MQTT), IoT message transfer (MQTT)

Mechanical and environmental

Dimensions	504 mm (D) x 437mm (W) x 43.4mm (H)
Weight	9 kg
Casing material	Metal
Cooling	6x Built-in fans (redundant function)
Operational temperature	5°C to +40°C, 8-90% RH non-condensing
Storage and transport temperature	-20°C to +60°C, 5-95% RH non-condensing
Physical security	Tamper evident casing Removable storage media (tamper seal not affected) Padlock support for covering administrative interfaces and removable storage media Inner enclosure to reduce compromising emanations

Interfaces and connectors

Input voltage	2x 100-240 VAC, 50-60Hz Separate power inlets for upstream and downstream interfaces
Power consumption	2x 25W (Power supply rating 2x 200W)
Network data ports	2x Gbit Ethernet (RJ45)
Administration ports	2x Gbit Ethernet (RJ45), 2x VGA, 6x USB 2.0
Supported standards	IEEE 802.3u (100Base-TX), IEEE 802.3ab (1000Base-T) with Auto MDI/MDIX

Regulatory compliance

CE	Compliance with applicable directives for EU
Environmental	REACH, RoHS, WEEE
Security certification	Swedish national approval – Component assurance level N3