ADVANCED TECHNOLOGIES INSTITUTE

IBD76

POINT-TO-MULTIPOINT IP ENCRYPTION DEVICE

IBD76 is a cryptographic device designed to encrypt point-to-multipoint IP communication in 10/100/1000 Mbps Ethernet networks. The communication is protected by the MAD-256-GCM symmetric encryption algorithm.

Description

The device must be connected between two networks, “CLEAR”, considered safe, which contains sensitive data, and “CIPHER”, considered unsafe. Data that passes through the “CIPHER” area will be encrypted and transmitted through cryptographic tunnels. The IBD76 can be used to transfer data only to other “CLEAR” networks protected by compatible devices.
The communication interfaces of the device enable two operating modes: 10/100/1000BASE-T full duplex *(using electrical interfaces)* and 1000BASE-X full duplex *(using SFP optical interfaces)*. Data transmission and reception are compliant with the IEEE 802.3i, IEEE 802.3u, IEEE 802.3z and IEEE 802.3ab standards.
The touchscreen offers real time information about tunnel status and communication interfaces.

Technical specifications

Power supply	230 VAC
Communication interfaces	10/100/1000BASE-T, 1000BASE-X
Throughput *(depending on the frame length)*	88 Mbps
Maximum packet length	8920 bytes
Processing latency time	< 1 ms
Number of cryptographic tunnels	128
Number of networks per tunnel	8
Management interface	RS232
Cipher algorithm	MAD-256-GCM
Power consumption	~12 W
Casing dimensions *(W x D x H)*	400x248x88 mm
Weight	5200 g

Environmental conditions

Operating temperature	0°C ... + 40°C
Maximum relative humidity	80%

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