

secure communication commbox – versatile, mobile communication network adaptor

Civil and National Security

The Atos CommBox is a versatile, field-deployable communication node which allows the setup of networks to connect field-deployed applications between each other or to a fixed network.

The CommBox provides a number of optical and electrical interfaces to allow to connect to a wide variety of signals and systems such as mobile-deployed radars, sensors, Line of Sight equipment, satellite transceivers, analog and digital telephones, serial interfaces, single IP equipment like computers, VoIP telephones (Power over Ethernet enabled) or whole IP networks.

The CommBox provides a fully featured firewall and other mechanisms like virtual private networks and encryption to ensure traffic integrity and protection.

The available Quality of Service mechanism allows for traffic shaping to provide an optimal usage of the available bandwidth and the optimal performance of applications which route their traffic via CommBox-enabled links.

Self protection and alerting mechanisms of the CommBox allow for unattended operation and for freeing field staff from time-consuming management and maintenance tasks. The CommBox can be managed remotely from a management system or locally by using a standard PC/laptop.



Benefits

- ▶ IP-capable network adaptor for field deployment and outdoor usage
- ▶ Adapts to state-of-the-art networks but also to your legacy systems
- ▶ Provides a multitude of military type interfaces on an interface panel and civilian type connectors via an extension box
- ▶ Protects signals and equipment via highly effective protection circuits
- ▶ Designed for outdoor deployment and an operating temperature range of - 30 to + 55 °C/ - 22 to + 130 °F
- ▶ Remote and/or local management
- ▶ Centralized and decentralized management capable
- ▶ Provides VoIP and emergency VoIP for split (degraded) networks
- ▶ Provides Quality of Service for your traffic according to customizable QoS schemes with regard to the attached systems

Technical features

Networking Features

- ▶ 10, 100, 1000 Mbps data rates on switch, router and firewall (Ethernet, FastEthernet, Gigabit Ethernet)
- ▶ Electrical and optical interfaces for military type of cables and fibres
- ▶ Compliant to ETSI, ITU-T, ANSI and EN standards
- ▶ Managed switch, switching capacity: 8.8 Gbps
- ▶ Modular, integrated services, high-performance enterprise branch office router with a broad range of interface options
- ▶ NAT/PAT for adaptation to legacy networks
- ▶ QoS capabilities

Security Features

- ▶ Integrated firewall, stateful inspection
- ▶ Virtual private network support
- ▶ Encryption: 3DES/AES
- ▶ Tamper-proof, sealable enclosure
- ▶ Virtual LAN ports, VLAN access lists

QoS Features

Support of the entire QoS framework from Cisco and includes the following techniques:

- ▶ Congestion Avoidance: Random Early Detection (RED), Weighted Random Early Detection (WRED), Flow-Based Weighted Random Early Detection
- ▶ Congestion Management using Class Based Weighted Fair Queueing (CBWFQ), First in First Out (FIFO) Queueing, Internet Protocol Real-Time Protocol Priority (IP RTP Priority), Low Latency Queueing (LLQ), Priority Queueing (PQ), Weighted Fair Queueing (WFQ)
- ▶ Packet Marking: Distributed CAR (DCAR), Multi Protocol Label Switching (MPLS)

Interfaces

- ▶ 16 × E1 with 2 Mbps (4 interfaces operational, additional interface cards available on request)
- ▶ 2 × E3 with 34 Mbps (interface cards available on request)
- ▶ 4 × 100 BaseT FastEthernet electrical (prepared for PoE)
- ▶ 3 × 100 BaseT FastEthernet optical (multimode, field-capable fibres, single mode on interfaces on request)
- ▶ 1 × 100 BaseT (PoE enabled) for VoIP/maintenance
- ▶ 1 × Power Out for Daisy Chaining of CommBox or for external equipment
- ▶ 2 × analog telephone connectors (33/56 kbps data via PPP)
- ▶ 3 × digital telephone connectors (64 kbps data via PPP, ISDN S/T and U interface)
- ▶ Both analog and ISDN links can be bundled to achieve higher bandwidth links (e.g. 4 × 64 kbps = 256 kbps)
- ▶ 4 × serial interface (EIA 232, EIA 422, EIA 485)
- ▶ 1 × antenna (interface card available on request)

VoIP Features

- ▶ Support of RTP, SRTP
- ▶ Control protocols: H.323, SIP, Skinny
- ▶ Codecs: G.711, G.723.1, G.726, G.728, G.729, G.729a, G.729ab, G.729b, GSM Full Rate
- ▶ Survivable Remote Site Telephony (SRST)
- ▶ PSTN Gateway

Remote Management Capabilities

- ▶ Cisco Discovery Protocol (CDP)
- ▶ Remote Monitoring for router and switch (RMON)
- ▶ SNMP trap generation
- ▶ MIB2 and private extensions
- ▶ Secured Web Access

Power over Ethernet

- ▶ 48 VDC for VoIP equipment
- ▶ All electrical Ethernet interfaces prepared for PoE

Environmental Features

Storage..... - 40 to + 70 °C/- 40 to + 140 °F
Operation..... - 30 to + 55 °C/- 22 to + 130 °F
Protection against dust, water and contact..... IP64

Power Requirements

Voltage input..... 230 or 110 V ± 10 %
Minimal power consumption..... normal operation 250 W
Maximal power consumption..... with heating 650 W
(if operated below - 10 °C/+ 14 °F) or
cooling 400 W (if operated above + 23 °C/+ 70 °F)

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