

COPPERWAY-BIS-4TTX

SECURE ACCESS ROUTER



Introduction

SECURITY

Encryption
Tamper-proof

The **CopperWay-Bis-4TTX** is an access router delivering Ethernet and digital interfaces over a mixed network of copper and optical fiber links.

The **CopperWay-Bis-4TTX** is a secure router that encrypts data using IPSec-type protocols. It can also operate as a Layer 2 switch, with full QoS, VLAN and traffic control capabilities.

The **CopperWay-Bis-4TTX** provides a very high level of security for critical networks, thanks to several security levels. Application flows are encrypted using AES-128/256 protocols. Network access is 802.1X authenticated, and system administration is protected by Radius authentication. To reinforce these security mechanisms, tamper-proof electronics are integrated into the hardware to secure sensitive data (encryption certificates) as well as the system's internal software.

The **CopperWay-Bis-4TTX** provides all necessary communication interfaces. It provides 4 Ethernet interfaces, 2 Gigabit Ethernet SFPs, a digital input and relay output with dry contacts, and an RS232/485 terminal port.

The **CopperWay-Bis-4TTX** features all IP protocols for ideal integration into the latest generations of information system infrastructure, including IPSec with IKEv2 and Hub-and-Spoke, SCEP.

CONNECTIVITY

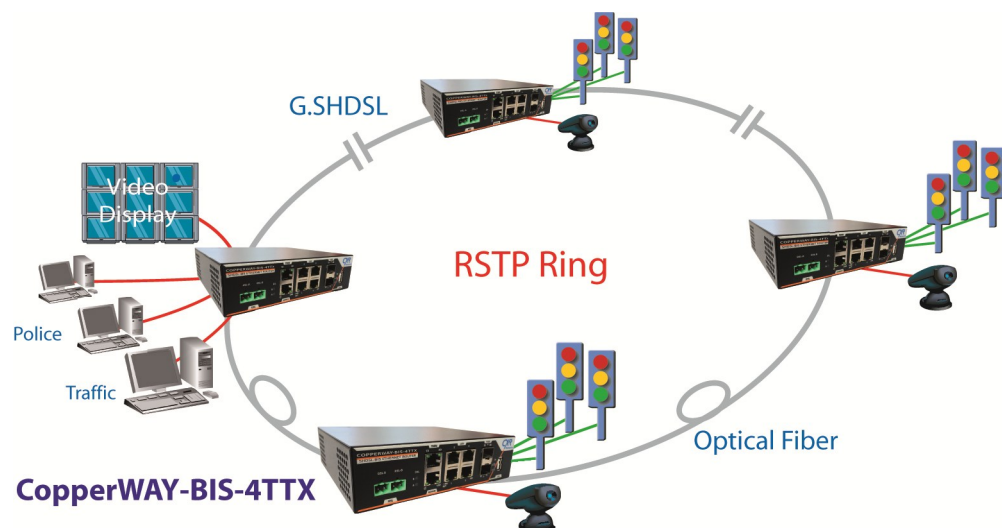
Copper Pilot
Optical fiber
Ethernet
Input & Output

Applications

Intelligent transport network: monitoring, protection, remote control, metering and administration.

The **CopperWay-Bis-4TTX** connects equipment with

Ethernet interfaces at every point of a copper pair and/or fiber optic infrastructure. It provides all the Ethernet communication interfaces required by business applications. It provides a high level of hardware and software security for these critical applications.



Specifications

SHDSL line interfaces
<ul style="list-style-type: none"> • 2x interfaces • SHDSL.Bis: TC-PAM 16/32/64/128 • Data rate: Nx64kbps, 192 kbps at 15.4 Mbps • EFM encapsulation, 802.3ah • Impedance 135 Ohms • Hardware resilience via bypass relay • Screw terminal connection
Ethernet interfaces
<ul style="list-style-type: none"> • 2x optical SFP Gigabit Ethernet interfaces • Choice of SFP MM 0.5/2km or SM 2 to 100km • 4x 10/100BT, 802.3, RJ45 interfaces • Auto MDI/MDIX • MAC address memory: 16 K • Frame buffer: 2 Mb
Ethernet protocols
<ul style="list-style-type: none"> • Frame size: 1,524 bytes • Resilience: STP, RSTP, 802.1D • Authentication: 802.1X • VLAN: 802.1Q, per port • QoS: 802.1p, priority per port/VLAN/DSCP • LLDP, 802.1ab
IP Protocols
<ul style="list-style-type: none"> • IP version: v4, v6 • Routing: static, GRE • VPN: IPSec, IKE v2, GRE • DHCP, DNS
Serial RS232/RS485 Interface
<ul style="list-style-type: none"> • RJ45 1 or 2 • Speed: 1,200 to 115,200 bps • Mode : RS232/RS485-2W/RS485-4W • Serial to IP conversion over IP, UDP or TCP • Encapsulation mode : Raw-ip (transparent), HNZ, Bloc, Message, Multipoint modem emulation

Digital Input and Relay Output
<ul style="list-style-type: none"> • 1x digital input • 1x relay output with dry contacts: 48Vdc / 0.1Amax • Screw terminal block
Administration
<ul style="list-style-type: none"> • Interfaces: USB, IP, RS232/485 Term • USB M/S port: CLI, Web server, memory card for configuration backup and software updates, event log • CLI: SSH (V2) • Web server: http (deactivatable) https (TLS1.2/TLS1.3) • SNMP: v1, v2c, V3 • Radius: web and SSH authentication • LLDP • Certificate management: SCEP • Security: SecureBoot, hardware certificate and firmware protection (AES, TDES) and hashage (SHA) • Diagnostics: Syslog, ping, tracer, interface and proto-
General features
<ul style="list-style-type: none"> • Stainless steel case, DIN rail clip • Dimensions: 168x145x44 mm (LxDxH) • Weight: 800g • Power supply: 1 x 12-24-48 Vdc input (10-60Vdc) • Max. power: 10W • Typical power: 7W • Operating temperature : -20 to +70°C, without fan • Humidity: 0 to 90% non-condensing • Conformity: CE, EN-62368-1, EN-61000-6-2, EN-61000-6-4 • MTBF: 242,000 Hours

Noise-free DSL performance over AWG26 / 0.4mm line:

Mbps speed	0.192	1.280	2.048	4.6	5.7	11.4	15.3
Distance km	7	4.5	4	2.5	2	0.9	0.4

Ordering Information

Référence	Description
CWAY-BIS-4TTX-MC	Secure router CopperWay-Bis-4TTX-MC
CWAY-BIS-4TTX-MC-DIN	Secure router CopperWay-Bis-4TTX-MC (Include din rail kit 6100-602784)
PROTEC-1DSL-2W	Lightning protection box, 2x par Cway
SFP-GSX-MM	SFP GE, Multi-Mode 850 nm, 500m, LC
SFP-GLX-SM20/40	SFP GE, Single-Mode 1310 nm, 20 or 40 km, LC
SFP-GLX-SM80	SFP GE, Mono-Mode 1550 nm, 80 km, LC
PS-DIN-12V-40/75/120W	DIN Power Supply, 230 Vac / 12 Vdc, 40W, 75W or 120W
CLIP RAIL DIN - INOX + VIS [6100602784]	DIN rail mounting bracket



CXR
T +33 (0) 237 62 87 90
www.cxr.com

17 rue de l'Ornette 28410 Abondant France
contact@cxr.com