

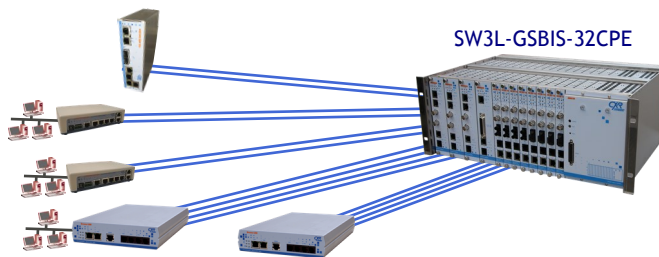
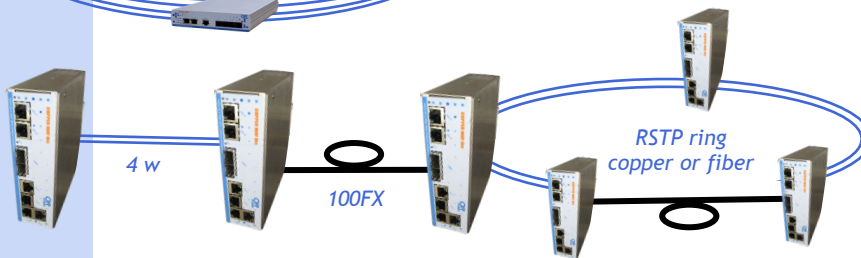
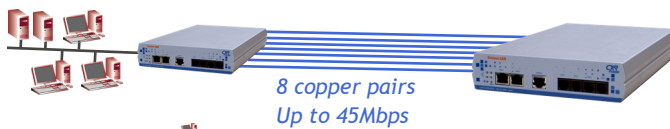
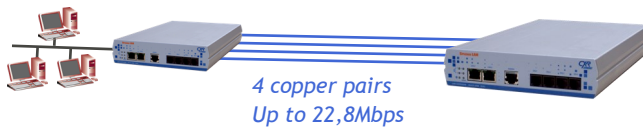
Ethernet Extensions over copper

EFM over G.SHDSL-Bis

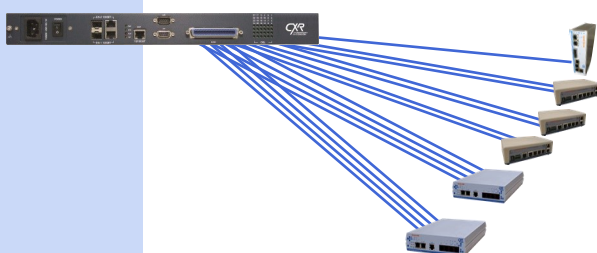


CXR introduce his third generation of Ethernet symmetrical transport over existing copper lines. Large number of available lines was used before for analogue voice line or base band modems. CXR has delivered several thousand "Ethernet extension" equipments for campus or infrastructures in Defense, production and transport of energies/ utilities or for Telco or small enterprises.

The G.SHDSL.bis technology supports an auto-rate from 200kbps to 5,7Mbps per pair. The EFM (Ethernet First Mile) carries the Ethernet traffic over one to four bounded pairs with automatic adjustment. CXR provide also 8 pairs solution up to 45Mbps or 1,6Mbps up to 11km. The CXR range support switch feature like VLAN, Q-in-Q, QoS...



SWM-24GSBIS-2CB



CopperLAN-Bis
SpeederLAN-Bis
CopperWAY-Bis
1,2 or 4 wires

CopperLAN-Bis

EFM G.SHDSL.bis 2/4 wires modem
Ethernet Bridge/Router/Switch
up 5,7Mbps/2w and 11,4Mbps/4w
VLAN par port, 802.1q, Q-in-Q
QoS, firewall, option POE PSE port

SpeederLAN-Bis-4

EFM G.SHDSL.bis 2 to 8 wires modem
Ethernet Bridge/Switch up 22,8Mbps
VLAN par port, 802.1q, Q-in-Q
QoS, OAM 802.3ah.

SpeederLAN-Bis-8

EFM G.SHDSL.bis 2 to 8 wires modem
Ethernet Bridge/Switch up 22,8Mbps
VLAN par port, 802.1q, Q-in-Q, QoS,
OAM 802.3ah.
Support 2 directions and RSTP ring

CopperWAY-Bis

EFM G.SHDSL.bis 2 x 4 wires modem
Ethernet Switch with 2 SFP 100FX
and 4 x 10/100BaseT
VLAN par port, 802.1q, Q-in-Q, QoS.
Support BUS or RSTP ring.
Option RS232/485 async ports encapsulation and dry contacts

SW3L-GSBIS-32CPE

Modular solution supports the concentration of 32 CPE 2, 4 or 8 w.
Layer3 integrated switch with 4 combo GE or 4 fiber 10GE.

SWM-24GSBIS-2CB

Compact 1U solution supports 24 pairs to concentrate 2, 4 or 8 w CPE.
Layer2 integrated switch with 2 combo GE.

Extend Ethernet over existing phone copper lines

Ethernet Extensions over copper EFM over G.SHDSL-Bis



G.SHDSL.Bis extension up to 10/13km with copper of 4/10 or 8/10mm

MODEL	CopperLAN-BIS	SpeederLAN-BIS -4	SpeederLAN-BIS -8	SpeederLAN-BIS -GE8	CopperWAY-BIS	CopperWAY-BIS -2TTX	SWM-24GSBIS -2CB
G.SHDSL Function	CPE or CO	CPE or CO	CPE or CO or dual CO	CPE or CO or 2, 4, 8 CO	CPE or CO or dual CO	CPE or CO or dual CO	Concentrator
Number of copper pair	1 or 2 p	1 to 4 p	1 to 8 p	1 to 8 p	2 x 1 to 2 p	2 x 1 p	24 p
Maximum Multipair support	2	4	8	8	2 x 2	2 x 1	4
Ethernet							
Ethernet function	Bridge/Switch	Bridge/Switch	Bridge/Switch	Bridge/Switch	Switch	Switch	Switch
Ports							
Ethernet LAN/WAN EFM ports	1 GSHDSL.bis	1 GSHDSL.bis	1 or 2 GSHDSL.bis	1 to 8 GSHDSL.bis	2 GSHDSL.bis	2 GSHDSL.bis	24 GSHDSL.bis maxi
Maximum EFM rate	15Mbps	22,8Mbps	45Mbps	120Mbps	2 x 11,4Mbps	2 x 15Mbps	22,8Mbps
Ethernet LAN/WAN copper ports	4 x 10/100BaseT	4 x 10/100BaseT	3 x 10/100BaseT	3 x 10/100/1000BaseT	4 x 10/100BaseT	2 x 10/100BaseT	4 Combo SFP 1000SX/LX & 10/100/1000BaseT
Ethernet LAN/WAN fiber ports				1 GSX/GLX SFP	2 x 100FX SFP		
Asynch encapsulated ports in RAW TCP or UDP	Option 1 RS232				Option 3 RS232 plus 3 RS232/RS485	1 RS232	
Dry contact ports	Option 2 In 2 Out				Option 1 In 3 Out		
Ethernet Switch							
Switch	Layer 3	Layer 2		Layer 2	Layer 2	Layer 2	Layer 2
VLAN	Port & 802.1q	Port & 802.1q		Port & 802.1q	Port & 802.1q	Port & 802.1q	Port & 802.1q
Provider VLAN	Q-in-Q*	Q-in-Q		Q-in-Q	Q-in-Q*	Q-in-Q*	Q-in-Q
QoS	Yes	Yes		Yes	Yes	Yes	Yes
Protection STP	STP/RSTP	STP/RSTP		STP/RSTP	STP/RSTP	STP/RSTP	STP/RSTP
Physique/Electrique							
Version	Plastic	aluminium		aluminium	metal	metal	metal
	Aluminium w DIN-Rail	19" rack mount		19" rack mount	DIN-Rail format	DIN-Rail format	19" 1U
Environment	-5 to 50°C	-5 to 50°C		-10 to 60°C	-10 to 60°C	-10 to 60°C	-5 to 50°C
Power supply	Versions AC, and Versions DC-48v	Versions AC, DC-48v and rack card for AMS4/16		-9 to -60Vdc	-9 to -60Vdc	-9 to -36Vdc	Versions AC