

ETHERNET EXTENSION UP TO 13 Km OVER 1 OR 2 TWISTED PAIRS



The SHDSL "XSLAN" range of switches enables two distant Ethernet networks to be connected using a twisted pair, or two pairs to double data-flow or guard against failure of one of the two lines.

On one voice-grade pair, the speed is 128 Kb/s to 2.3 Mb/s depending on the distance and the quality of the line. It can reach 4.6 Mb/s if two pairs are used.

The product can also function as an IP router, filter broadcast frames and manage flow priority (QoS), optimising use of the line.

It is designed for demanding applications: wide temperature range, low consumption, double power supply, overvoltage protection.

A few DIP-switches are all that is required for installation. Advanced features are adjusted using an html server.

Depending on the model, there are 4 10-100 BT Ethernet ports or 2 Ethernet ports and 2 serial ports.

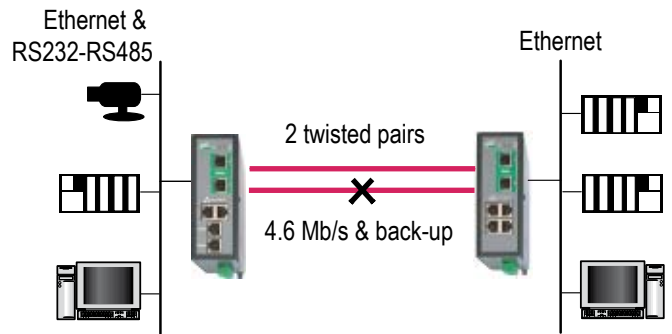
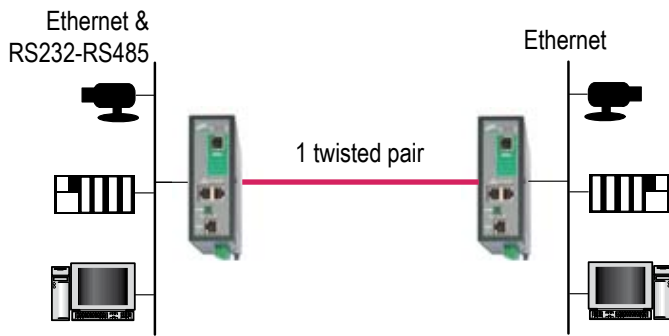
Key features

- Up to 13 Km over a 0.9 mm line
- Up to 2.3 Mb/s (2 wires product)
- Up to 4.6 Mb/s (4 wires product)
- 4 ethernet 10/100 ports
- IP router
- DiffServ Quality of service
- RS232-RS485
- DIP-switches or web configuration

Applications

- Industrial ethernet network extension

XSLAN SHDSL Switch



General characteristics

Dimensions	135 x 47 x 115 mm (HxWxD)
Installation	DIN rail 35 mm
Protection class	IP20
Power	<ul style="list-style-type: none"> ■ 9 to 40 VDC / 200 mA at 24 VDC ■ Reverse polarity protection
Output	Relay 1 A @ 24VDC max.
EMC immunity	<ul style="list-style-type: none"> ■ ESD : EN61000-4-2 : 6 KV contact discharge ■ RF field : EN61000-4-3 : 10V/m < 2 GHz ■ Fast transient : EN61000-4-4 ■ Surge V. : EN61000-4-5 : 4KV line / earth
Safety	EN 60950 & UL1950
Banned substances	2002/95/CE RoHS european union directive
Humidity	5 to 95 % RH non condensing
Operating T°	-20°C/+60°C 95%

Transmission

Cable	1 twisted pair (2 wires) or 2 twisted pairs
Wire diam.	0.4 mm to 1 mm
Modulation	UIT-T G.911.2
Data transmission	802.3ah : 2BaseTL
Data rate 2 wires	128 Kb/s up to 2.3 Mb/s
Data rate 4 wires	256 Kb/s up to 4.6 Mb/s
Data rate adaption	Automatic or manual
Latency	4 ms at 2,3 Mb/s & 6 ms at 512 kb/s

Distance in Km

Data rate (2 wires)	128 Kb/s	1.15 Mb/s	2.3 Mb/s
Data rate (4 wires)	256 Kb/s	2.3 Mb/s	4.6 Mb/s
Distance (Ø 0.9 mm)	13 Km	8 Km	6 Km
Distance (Ø 0.4 mm)	7 Km	4 Km	3 Km

Ethernet /Switching / VLAN

Bridging	IEEE 8021d transparent bridging
MAC @ learning	2048
VLAN	VLAN IEEE802.1Q pass through

TCP/IP / management (except XSLAN-140)

Management	SNMP V2 standard MIB
Quality of Service	4 priority levels management <ul style="list-style-type: none"> ■ DiffServ compliant
IP Router	<ul style="list-style-type: none"> ■ Static routes & RIP ■ Broadcast filtering
Configuration	■ DIP switches for basic functions & Html server

RS232-RS485 gateway (option)

RS232-RS485	<ul style="list-style-type: none"> ■ Raw client & server- Multicast - Telnet serv. ■ Modbus master & slave ■ 2 serial ports (see ordering infos) ■ 1200 to 115200 b/s 8 bits parity N/O/E
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Interfaces

Ethernet	<ul style="list-style-type: none"> ■ 10-100 Mb/s auto MDI / MDIX ■ 2 or 4 RJ45
RS232-RS485	1200 à 115 200 b/s 8 bits parity N/O/E
USB	Host and device
Alarm	Voltage free output
Power	Double power supply voltage input
Shdsl	1 or 2 RJ45 - cables provided



2 wires products	XSLAN -140	-1400	-1220	-1230
2 wires - 2.3 Mb/s	Y	Y	Y	Y
10-100 ethernet port	4	4	2	2
RS232	0	0	1	2
RS485	0	0	1	0
SNMP, IP Router , QoS	N	Y	Y	Y

4 wires products	XSLAN -2400	-2220	-2230
4 wires - 4,6 Mb/s		Y	Y
Line backup		Y	Y
10-100 ethernet port		4	2
RS232		0	1
RS485		0	1
SNMP, IP Router, QoS		Y	Y

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