



- Feature rich LAN extension over Serial, E1, E3 or DS-3
- Quad port Ethernet switch on subscriber side
- 4 Auto-negotiating subscriber 10/100 BaseT ports
- Auto MDI/MDIX switching on all subscriber ports
- Wire speed local switching between subscriber ports
- Wire speed filtering of local packets
- Efficient HDLC packet handling on WAN port:
82236 packets per second on DS-3
- Serial version with X.21, or V.35 interfaces
- EIA-530 interface option via external cable
- Integral auto-sensing PSU, optional integral -48VDC supply



datasheet **WAN-in-a-CAN®**

The *WAN-in-a-Can* range of LAN extender products extend LAN connection over a wide area link. The integrated 4-port LAN switch supports local switching, thereby removing the need for external switches or hubs in smaller LAN installations. Full wirespeed switching and filtering between the 10/100 BaseT LAN ports is supported so that only packets destined for the remote site are forwarded over the link. Different *WAN-in-a-Can* models support E1, E3 and DS-3 leased line links, and also serial X.21 and V.35 connections.

The *WAN-in-a-Can* family requires no configuration in most installations, and is truly “plug and play”. The subscriber ports are auto-sensing and support both 10M and 100M in full or half duplex modes. Manual selection of 100M FD operation enables connection to fixed port routers. Cabling issues are minimised through the use of automatic MDI/MDIX selection on these ports.

The highly efficient HDLC encapsulation of packets ensures that maximum throughput is achieved on the WAN link. Internal packet buffering enables each *WAN-in-a-Can* product to smooth out bursty traffic without packet loss.

For low bandwidth applications such as BT's *Kilostream*, the WC-X.21 and WC-V.35 models offer a choice of X.21 or V.35 DTE interfaces. The X.21 interface is presented on a 15 way D-type connector and the V.35 on a 34 way M-rack connector. An external cable can be used to convert an X.21 interface into EIA-530. The serial port operates in DTE mode, and requires the attached DCE to supply timing. The X.21 port may also be operated in a dual-clock, EIA-530 mode to support asymmetric operation.



About Metrodata

Founded in 1989 and based near London's Heathrow airport, Metrodata is a leading designer and manufacturer of datacommunications hardware for Fixed line, Satellite, Enterprise and Carrier networks. Specialising in interoperability and interconnectivity, Metrodata offers a range of Standard, Niche and System Integrated type products. These include Media converters, Interface converters, Fibre converters, Ethernet extenders and ATM switching and Circuit emulation products. Other specialist products manage high data rates and clock sensitive applications to ensure higher network performance. Metrodata provides COTS products to the commercial, government and defence sectors, as well as developing turnkey products to specific customer requirements. For more information and data on Metrodata products, visit our web site at www.metrodata.co.uk

Specifications

Subscriber	Port Specs	Environment	
No of Ports	4	Temp	0 - 50 degC
Presentation	10/100BaseTX, RJ45, Auto MDI/MDI-X	Humidity	95% RH, non-condensing
LED support	Link/Activity & Speed	Pressure	86-106 KPA
Operating mode	Auto-negotiate for 10/100, Full or Half duplex	Power supply options	
Port filtering rate	148810 packets/second	-48VDC Supply	-40 to -72 VDC, 150 - 85 mA
Port switching rate	148810 packets/second	AC Mains	100-250 VAC, 50-400 Hz, 60 - 25 mA, IEC connector
Switch mode	Any to any	Power Consumption	6 watts approx when operating
MAC address table	4096 entries		
Min/Max packet size	64 bytes / 1522 bytes		

WAN Port Specs	WC-X.21	WC-V.35	WC 1000	WC 3445	WC 3445
Mode	Serial	Serial	E1	E3	DS-3
Presentation	15-way Male D-type	34 way female M-rack	75 ohm BNC or 120 ohm RJ45	75 ohm BNC	75 ohm BNC
Line rate	20 Mbps (max)	20 Mbps (max)	2.048 Mbps	34.368 Mbps	44.736 Mbps
Frame mode	Unframed	Unframed	Unframed	Unframed	Unframed
Timing	DCE supplied	DCE supplied	Internal/loop	Internal/loop	Internal/loop
Encapsulation	HDLC	HDLC	HDLC	HDLC	HDLC
Max packet rate	38462 at 20Mbps	38462 at 20Mbps	4064	64120	82236
LEDs	Tx/Rx Packet	Tx/Rx Packet	Tx/Rx Packet, WAN LOS Alarm	Tx/Rx Packet, WAN LOS Alarm, PRBS Test & Error	Tx/Rx Packet, WAN LOS Alarm, PRBS Test & Error
Set-up	Dip-switches on base	Dip-switches on base	Dip-switches on base	Dip-switches on base	Dip-switches on base
Alarms	None	None	LOS	LOS	LOS
Diagnostics	None	None	External loop	External loop	External loop

Part numbers

Part Numbers	WC - X.21	WC - V.35	WC 1000	WC 3445
Power 100-250 VAC	80-05-545	80-05-546	80-05-541	80-05-542
Power -48 VDC	80-21-545	80-21-546	80--21-541	80-21-542

For more data on Metrodata products and services, visit our website at www.metrodata.co.uk
 Metrodata reserves the right to change specifications without notice.
 Please check when ordering.

