

# WAN-in-a-CAN WC-155

- Low cost, feature rich LAN extension over Fibre
- 10/100BaseT Auto Sensing User Port
- Auto MDI/MDI-X switching on User port
- Wire speed forwarding of remote packets
- Wire speed filtering of local packets
- SONET OC-3/SDH STM-1 Framing with GFP WAN Port.
- Alarm Relay
- Integral auto-sensing PSU, and optional –48V support



The “WAN-in-a-CAN” WC-155 provides a low cost, high performance LAN extension over fibre. The WC-155 uses GFP (Generic Framing Procedure) encapsulation over a selectable OC-3 or STM-1 155.52Mbps fibre interface. The WC-155 is a virtually “plug and play” device with configuration options selectable on bit switches where non default operation is required.

The WC-155 provides a single user port presented as an RJ45 supporting a 10/100BaseT interface. Auto-negotiation and automatic MDI/MDI-X crossover switching are available by default, though full manual control is available using the bit switches. The user port will perform MAC address based filtering of local packets and will forward all other packets.

The “WAN-in-a-CAN” product family performance is shown in the table below and shows the maximum performance gained against a LAN tester, and also the performance when overloaded with wire speed LAN traffic, 148810 pps.

Product	Link Speed	Maximum	Overloaded
WC-155	155.52Mbps	148810pps	148810pps

In more complex installations using VLANs, the “WAN-in-a-CAN” supports large frames up to 1522 bytes thereby allowing the transport of VLAN tagged packets.

The WAN port is presented as a duplex SC Fibre transceiver and variants support Multi-Mode, Single Mode Short Haul and Single Mode Long Haul applications. The WAN interface operates at 155Mbps and supports either SONET OC-3 or SDH STM-1 framing. The WC-155 offers both internal and loop timing modes. LAN traffic is transported across the WAN using the GFP (Draft Rev 2 ANSI T1X1.5). The WC-155 requires the full OC-3 or STM-1 bandwidth to transport the user LAN traffic and offers full wire speed, full duplex operation.

For critical applications, an external alarm relay is provided to indicate power failure and WAN port alarm conditions. LEDs also indicate unit status.

datasheet WAN-in-a-CAN

### Technical Specifications

#### User Ports

<b>Presentation:</b>	10/100BaseTX, RJ45, Auto-MDI/MDIX
<b>LED support:</b>	Link/Activity and Speed
<b>Operating Mode:</b>	Auto Negotiate for 10/100, Full/Half Duplex with Manual override
<b>Port Filtering Rate:</b>	148810 packets per second
<b>Port Switching Rate:</b>	148810 packets per second
<b>MAC Address Table:</b>	4096 entries
<b>Min/Max Packet size:</b>	64 bytes / 1522bytes

#### WAN Ports

<b>Presentation</b>	Duplex SC Fibre Transceiver		
<b>Fibre Type</b>	Multi-Mode	Single Mode SH	Single Mode LH
<b>Wavelength</b>	1310nm	1310nm	1310nm
<b>Loss Budget</b>	11dB	15dB	29dB
<b>Framing</b>	SONET OC-3 or SDH STM-1		
<b>Data Rate</b>	155.52Mbps		
<b>Encapsulation</b>	GFP over OC-3/SPE or STM-1/VC4		
<b>Alarms</b>	LOS, LOF, AIS, Loss of Clock		

#### Part Numbers

	<b>AC 100-250V</b>	<b>DC -48V</b>
WC-155 (MM)	80-05-547	80-21-547
WC-155 (SM-SH)	80-05-548	80-21-548
WC-155 (SM-LH)	80-05-549	80-21-549

To find out more about Metrodata Products and Services visit our website  
[www.metrodata.co.uk](http://www.metrodata.co.uk) or call on +44 (0) 1784 744700.

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