# Dewar DM760 Fibre Converter

**Designed and manufactured in Australia**


## Simple conversion of G.703 to C37.94 over long distances

The DM760 Fibre Converter, G.703 to C37.94 is intended for connecting Teleprotection equipment to multiplexers at substations.

Any existing 4 wire G703 interface can be converted into C37.94 and extend the distance of a signal in excess of 100km, with barely noticeable delay (250uS)

In 1998 Dewar developed the DM750, their first G703 to Fibre Converter. We now have a new version of this device, the “DM760” with updated technology available, this has enabled us to provide long distance connection. A simple co-directional G.703 to C37.94 Fibre Converter system, only 1U high providing long distance connection of G.703 devices over fibre. This device is easy to install with minimal setup time.

The DM760 communicates with the remote DM760 unit using the IEEE C37.94 protocol which can be used in a back-to-back configuration or via a multiplexer.

The DM760 provides four Fibre Converters and Indication LEDs displaying the status of the G.703 and C37.94 communication links.

The Fibre Converter applications range across diverse industries such as oil and gas, telecom, power substations, windfarms, photovoltaic, aerospace, defence, and transportation.

The DM760 terminal consists of a 19 inch by 1U sub rack containing all the modules. The sub rack contains a power supply unit (PSU), Main Board and Communication Board.

# General Specifications

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|---|---|
| Model: | DM760 |
| Capacity: | Four Converter Modules |
| Power Supply: | One or Two:<br>48 Volt DC(20-60VDC)<br>110 Volt DC (66-160VDC)<br>240 Volt AC/DC (90-264VAC/DC)<br>Led Indicator; power out.<br>Protection: Input fuse, Current Limit and Short circuit. |
| G.703 Compliant Communication: | Standard Compliance four wire<br>Co-Directional: G703, 64KBit<br>Termination: 120 ohm<br>Response delay: <250uS<br>Led Indicators: Data Signal Present<br>Rx & Tx Power |
| C37.94 Compliant Communication: | Standard compliance MM 820nm, MM1310 nm and SM 1310nm |
| General: | Isolation: 500 VDC between-:<br>1/ Data Signals and PSU earth<br>2/ I/P & O/P Data signals and earth |
| Ambient Conditions: | Exceeds IEC834-1<br>Ambient temperature –10°C to +55°C<br>Humidity 0 to 95% non-condensing<br>Altitude 2000 metres fully rated; 3500 metres maximum de-rated to 150 volts maximum applied voltage |
| Physical size: | Case: 19” standard rack width x 1U high |
| Dimension: | Height 43.8mm, Width 440.5mm, Depth 241mm (Without Cable Holder)<br>Height 43.8mm, Width 440.5mm, Depth 316mm (With Cable Holder) |
| Weight: | 3KG Approx. |
| Mounting: | Flush or semi projection mounting |
| Shipping Weight: | 4KG (maximum) |