"Results You Can Count On"

WT-380 Automated Switching Solution

For 48 Twisted Pairs or 40 Twisted Quad Cables

WT-380 defines multi-line, vectored performance testing of Gfast modems using profiles 106 or 212. This is done over 48 (or 40) short or long loops of twisted pair (or twisted quad) cables. The Telebyte Model 600 switching platform is used to create the short or long loop test setup by switching the initial cable segment in or out. It will also automate the switching.

- **Ideal for automated switching of multiple lines per WT-380**
- **Switching for 48 twisted pairs (24AWG) or 40 twisted quad (PE4D-ALT) cables**
- **High performance transparent switches**
- **100 Ohm terminations for unused pairs**
- **Short Range 3 Reverse Power Feed support**
- **Bidirectional**
- **Low crosstalk**
- **Very low insertion loss**
- **Modular architecture allows for expansion**

Six switching modules (Model 600-SM-16-1-2-TP-100) plug into one compact, rack-mountable chassis (Model 600-6SL).

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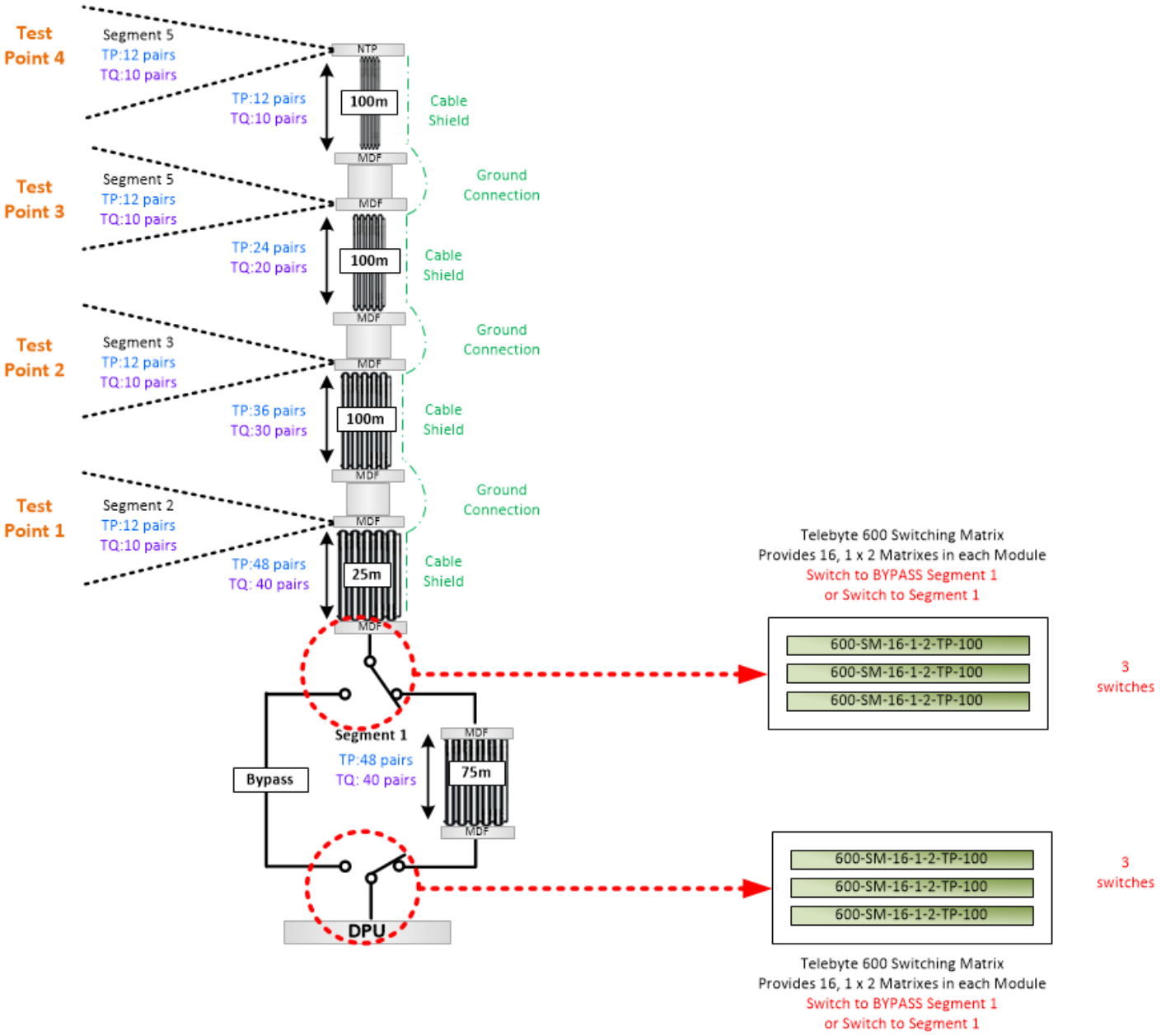
WT-380 Test Setup



The above diagram shows the location in the WT-380 test setup where Telebyte's switching solution is used to automate the switching in (or bypassing) of the 75m cable segment.

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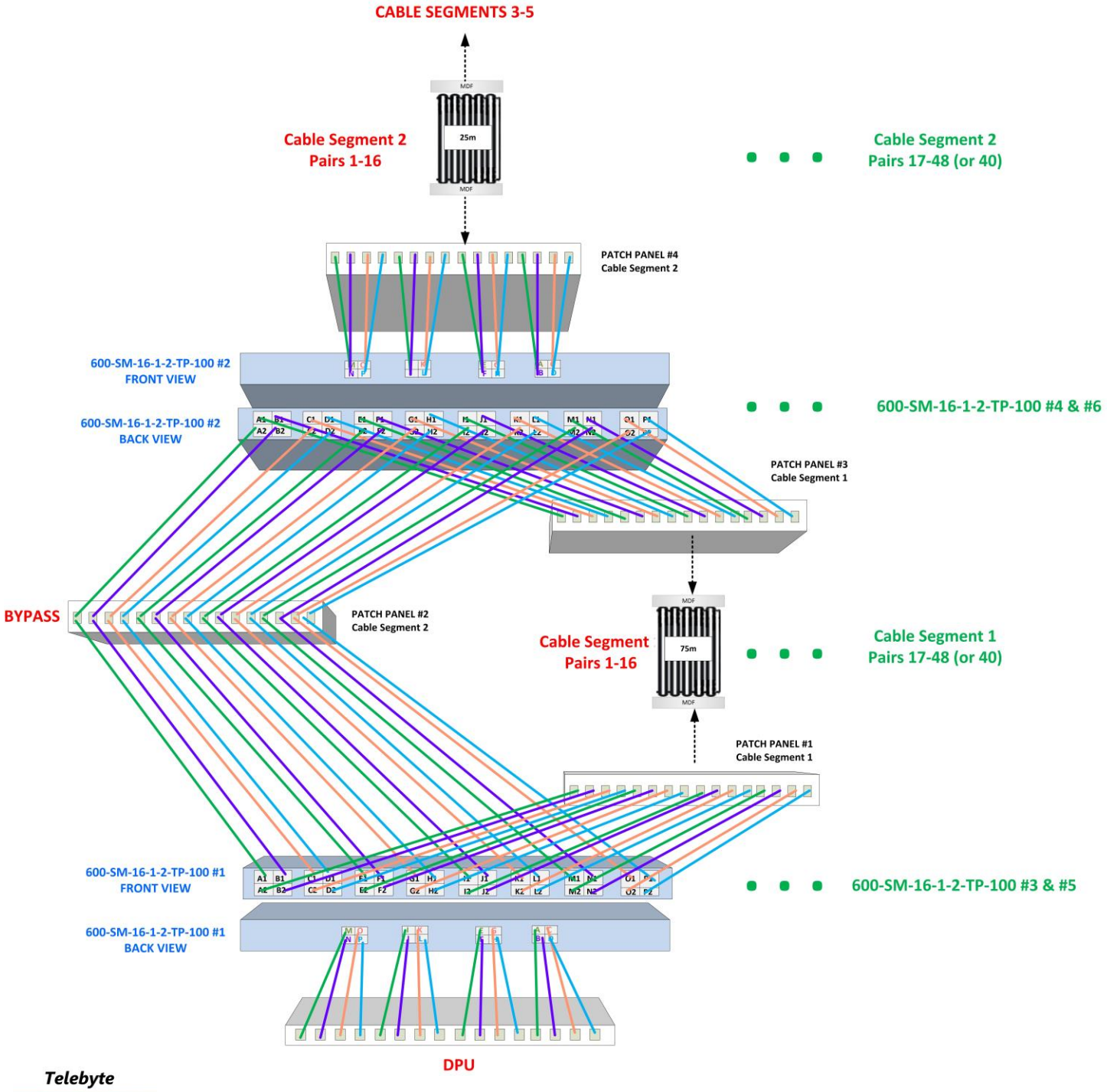
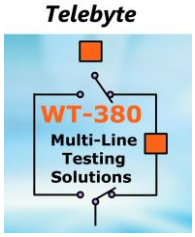
Connection Diagram for Switching in WT-380





The equipment needed for switching 48 (or 40) twisted pairs in both directions is shown in the diagram above. The switching can be automated using Telebyte's remote commands. Note: While not shown in the above diagram, the cables should be shielded per the WT-380 requirements. All switching modules shown would be installed in one compact chassis.

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Solution Components

Model	Quantity	Description
600-SM-16-1-2-TP-100	6	Transparent Switching Matrix Module (16, 1x2) Twisted Pair Cable
600-6SL	1	Chassis accepts six 600 series modules. Required for control of modules. Includes web browser-based graphical user interface.
Custom Cabling and/or patch panel		Custom cabling and/or patch panels are available for interfacing to the 600 switching platform.

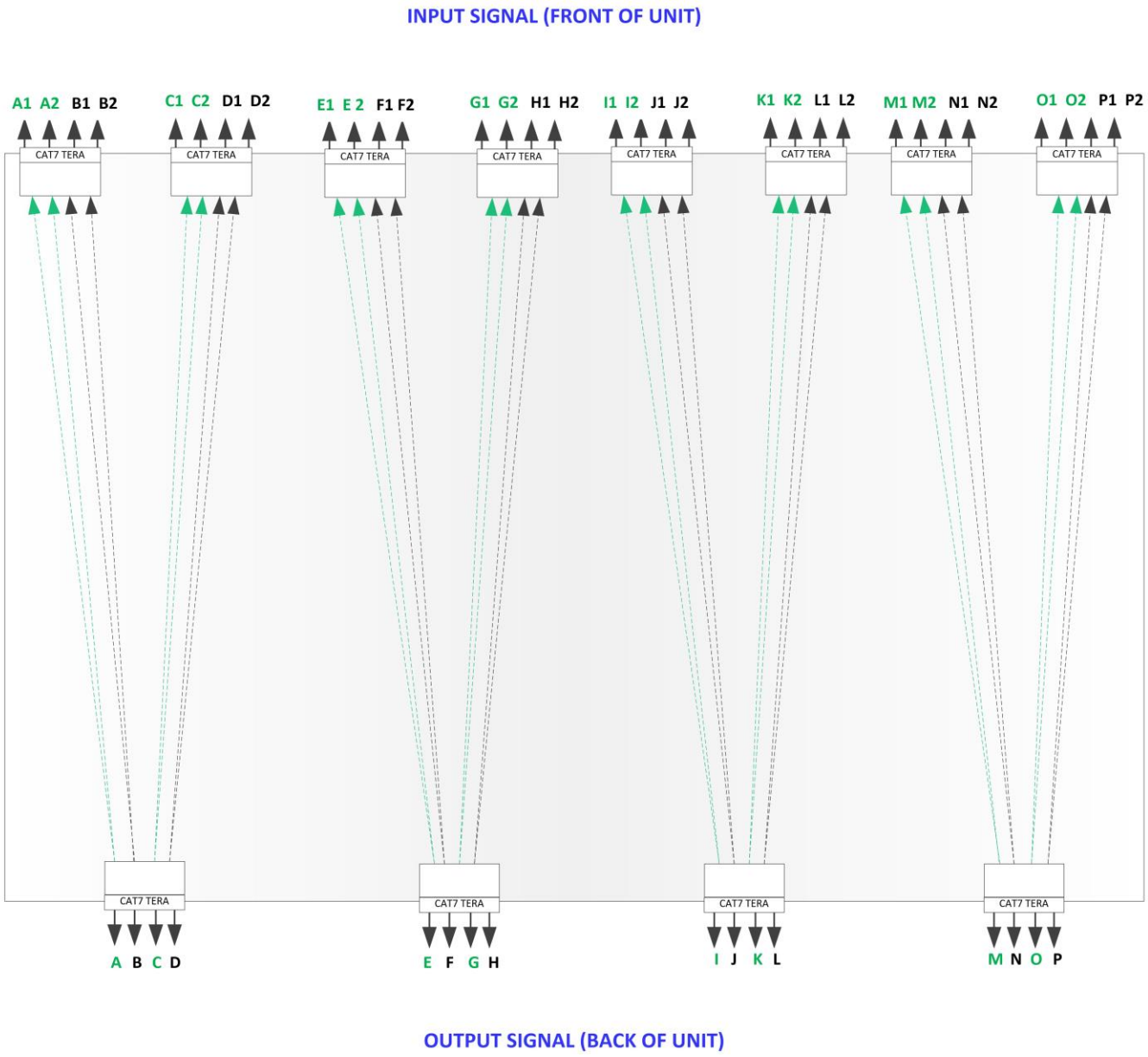
Component Specifications

Product Specifications 600-SM-16-1-2-TP-100 Transparent Switching Matrix Module	
Bidirectional Signal Switching Capability	16 sets of: 1 output channel to any one of 2 associated input signal channels 16 sets of: Any one of 2 input signal channels to 1 associated output channel
Insertion Loss	25 kHz to 30 MHz: 0.25dB (maximum) 30 MHz to 200 MHz: 0.37dB (maximum)
Signal Connectors	• 8 CAT7 TERA on front (each CAT7 TERA provides connectivity for 4 twisted pairs) • 4 CAT7 TERA on back
Noise Floor	less than -150 dBm/Hz
Impedance	100 ohms
Terminations	100 ohms
Relay Cycles of Operation	More than 5,000,000 cycles
Reverse Power Feed Support	Short Range 3

Product Specifications 600-6SL 6-Slot Chassis	
Capacity	Accepts 1-6, 600 Series modules
Remote Control	Web Interface, or remote commands via Telnet
Mounting Options	Desktop or mount in 19" inch rack
Dimensions	[4U] 19 in W x 6 in D x 7 in H (482.6 mm W x 152 mm D x 177.8 mm H)
Power Supply Requirements	88 to 264 VAC, 50 or 60 Hz

Specifications are subject to change without notice. Made in USA.

600-SM-16-1-2-TP-100 Matrix Diagram



The Model 600-SM-16-1-2-TP-100 switching matrix allows 16 lines to be switched to any 1 of 2 connections. Six of these modules are installed in the Model 600-6SL chassis.

For more information contact sales@telebytebroadband.com