## MAP Series PCT Enhanced TDR mORL-A1 with MSUP-300A-PCT-TDR

The Enhanced TDR capability within the PCT framework allows production environments to leverage OTDR technology for IL and RL measurements of fiber features, like connectors, without connecting to a power meter.

The new Enhanced TDR feature in an innovative software add-on to the Passive Component Tester system, leveraging VIAVI's 40-year leadership in innovative optical test and measurement equipment.

Critically, Enhanced TDR allows for troubleshooting following an IL/RL measurement where the DUT fails. Operators can now quickly and easily toggle to ETDR mode on the same software, without moving any equipment, and know the location of the fault within the DUT.

Additionally, measuring optical connectivity can be cumbersome when fibers or cables are intended to be shipped without connectors. However, IL/RL meters require a power meter connection to measure the Insertion Loss of a DUT and are unable to resolve singular fiber events.

VIAVI has unleashed a new testing synergy to bring together the opportunity of OTDRs with the production reliability of the PCT architecture in the Enhanced TDR feature. This allows production environments to use an OTDR – with data processing and operational levers to drive operator efficiency and success. Allow Enhanced TDR to bring together the best of both worlds in your optical production environment.



## **Specifications**

Parameters	Specification (Single Mode) Specification (Multi Mode)		n (Multi Mode)	
Wavelengths Available	1310 nm and 1550 nm with 1490 and 1625 as an optional add-on		850 nm and 1300 nm	
Minimum DUT Length <sup>1</sup>	3 m			
OTDR Maximum Range	10 km			
Return Loss Accuracy <sup>2</sup>	30 to 70 dB	±1.0 dB	15 to 20 dB	±1.8 dB
	70 to 75 dB	±1.7 dB	20 to 60 dB	±1.3 dB
	75 to 80 dB	±3.0 dB		
Return Loss Repeatability <sup>2</sup>	30 to 65 dB	±0.1 dB	15 to 60 dB	±0.2 dB
	65 to 70 dB	±0.2 dB		
	70 to 75 dB	±0.4 dB	001 70 10	
	75 to 80 dB	±1.5 dB	60 to 70 dB	±0.5 dB
Measurement Time <sup>3</sup>	2 s			
Pulse Widths Available	3 ns, 30 ns		3 ns	
Spatial Resolution	4 cm @ 3 ns, 8 cm @ 30 ns			
IL Measurement Accuracy <sup>4</sup>	± 0.05 dB		± 0.15 dB	
IL Measurement Repeatability <sup>4</sup>	± 0.025 dB		± 0.05 dB	
IL Measurement Dynamic Range <sup>4</sup>	10 dB			
Software Interface	Onboard, Computer-Free User Interface or Remote SCPI Commands			
Recalibration Period	1 year			
Warm-up Time	20 min			
Operating Temperature, Humidity	25 ±5 °C non-condensing humidity			
Storage Temperature	- 30 to + 60°C			
Size (W x H x D)	4.06 x 13.26 x 37.03 cm (1.6 x 5.22 x 14.58 in)			
Weight (Approximately)	1.2 kg (2.65 lb)			

Notes:

<sup>1</sup> Minimum DUT length for input connector IL measurement at 3 ns pulse width.

<sup>2</sup> Specifications provided at 5 s averaging time and 200 m range, using 10 measurements with a stable connection of a 3 m patch cord.

<sup>3</sup> Per channel per wavelength, additional averaging times available at 5, 10, 30 and 60 seconds.

<sup>4</sup> Measurement uncertainty as total expanded uncertainty (2σ), with valid test lead and DUT connection at 30 ns pulse width and 5 seconds averaging time.

## **Ordering Information**

## License

Part Number	Description
MSUP-300A-PCT-TDR	MAP-300 Enhanced PCT TDR License

For more information on this or other products and their availability, please contact your local VIAVI account manager or VIAVI directly at 1-844-GO-VIAVI (1-844-468-4284) or to reach the VIAVI office nearest you, visit <u>viavisolutions.com/contacts</u>.



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mapseries-pct-tdr-ds-lab-nse-ae 30194502 900 0625

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