

DORC Interferometers



Direct Optical Research (DORC)

ZXPMS+ & ZXMARRAY+ Bench-Top Interferometers

Direct Optical Research Company specializes in the design and manufacturing of non-contact interferometers for the optical fiber and connector industry. DORC's range of ZX-1 Interferometers and Phase Measuring System (PMS) software has been specifically designed to meet the ever-increasing need for accurate, automated, high volume testing of ferrules, ferrule blanks, connector assemblies, pigtails, patchcords, array connectors and optical fiber cleaves.

Easy to Use

Auto-Focus - Extremely easy to use, the operator simply inserts the connector under test into the chuck and initiates the measurement - no centering or focusing is required. The system will then automatically center and focus, perform all the necessary calculations and give a pass/fail analysis in a less than a second for simplex connectors and approximately 16 seconds per section for multi-fiber connectors.

Zero Downtime

Computer Independence - DORC interferometers have a built-in hard drive. Calibrations, operator settings and measurements are all backed up internally so if the computer your are using happens to fail, you can simply replace it with another computer. This allows you to be up and running in minutes while other systems require a complete factory recalibration.

ZXPMS+

Single Fiber Interferometer

Designed to work with single fiber connectors only, the ZXPMS+ performs fast and repeatable measurements on radius of curvature, apex offset and undercut/protrusion. It also captures a clear image of the tip of the ferrule to give the operator the ability to make a visual scratch analysis at the same time. The "with tilt" feature on the connector chucks allow the unit to be used with APC connectors with the addition of an appropriate adapter plate. System is standard with a laptop computer but can be supplied with a desktop upon request.

ZXMARRAY+

Single & Multifiber Interferometer

DORC's latest version of their multifiber interferometer is now capable of measuring BOTH multifiber and single fiber connectors. Because the endface of a multifiber connector covers a much larger area, the ZXMARRAY+ uses a camera with a much wider field of view. But even with this wider field of the view, the multifiber system is still capable of performing the same fast and repeatable measurements on single fiber connectors. However, the image captured shows almost the entire endface of the ferrule so a visual scratch analysis would not be recommended using this system as it is using the single fiber system. System is standard with a laptop computer but can be supplied with a desktop upon request.

Self Calibrating - The ZXMARRAY+ has a built-in, automatic apex offset calibration system for MT connectors. Before every measurement, the system calibrates itself to ensure absolute accuracy. Other systems require periodic, manual adjustments which leads to down time and the potential for mis-information.

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Specifications may change without notice

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Ordering Information

Part #	Description
ZXMARRAY+	DORC ZXM-ARRAY Plus Multifiber Interferometer. Includes Laptop PC (Desktop Optional, if specified on PO) and MT or MT-RJ connector chuck to be specified at time of order.
ZXPMSPLUS	DORC ZX-1 Mini PMS PLUS Zoom Interferometer. Includes Laptop PC (Desktop Optional, if specified on PO). Requires connector chuck for operation.

Accessories

Part #	Description	Part #	Description
Multifiber Connector Chucks - ZXMARRAY ONLY			
MT CHUCK	MT/MT-APC Chuck including adapters for connectors with & without housings and integrated guide pins		
MTRJ CHUCK	MT-RJ Chuck including adapters for connectors with & without housings and integrated guide pins		
Single Fiber Connector Chucks			
2.5-WT	Universal 2.5mm with tilt	1.25-WT	Universal 1.25mm with tilt
2.0-WT	Universal 2.0mm with tilt	3.0-WT	Universal 3.0mm with tilt
BFH-WT	Bare fiber holder (125um) with tilt		
"Mapped" Reference Connectors (For use with 1H and 1L chucks)			
REF2.5 MAN	2.5mm for Manual Systems	REF1.25 MAN	1.25mm for Manual Systems
REF2.5 PMS	2.5mm for PMS Systems	REF1.25 PMS	1.25mm for PMS Systems
REF1.25 APC	1.25mm LC/APC for PMS Systems. Includes MATCHING 2A adapter plate.	REF2.5 APC	2.5mm SC/APC for PMS Systems. Includes MATCHING 2A adapter plate.
Adapter Plates (For use with APC connectors)			
FC/APC AP	FC/APC connector adapter plate	LC/APC AP	LC/APC connector adapter plate
ST/APC AP	ST/APC connector adapter plate	MU/APC AP	MU/APC connector adapter plate
SC/APC AP	SC/APC connector adapter plate	BSC/APC AP	BSC connector adapter plate
DIN/APC AP	DIN/APC connector adapter plate	FER/APC AP	APC ferrule adapter plate
E2K/APC AP	E2000/APC connector adapter plate		
Miscellaneous			
BAR CODE	Bar code CCD reader for PMS Systems		