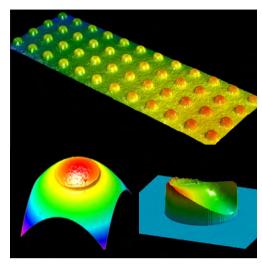


# MT Pro Single/Multi - Channel Integrated Interferometer



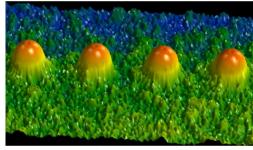


#### **Main Features**

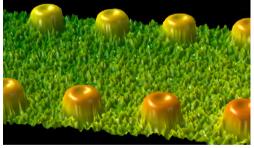
- Up to 1.5um image resolution
- Quick measurement, 0.5s for Single fibre or 5s for 12 core MT High repeat-ability
- High accuracy, calibrated with 0.1nm laser interferometer Ferrule frame mounting
- Compatible with single to 72 fibre measurement
- FOV 4.3\*3.3mm, capable for 16 core MT measurement Auto focus and Auto measurement
- Auto calibration with reference mirror
- Quick switch between 0° and 8° fixtures
- Intuitive software interface

# Up to 1.5um image resolution

MT Pro uses an upgraded optical system to accurately restore the details on the MPO facets and profile. The accurate raw data ensures the trust-able 3D testing results.



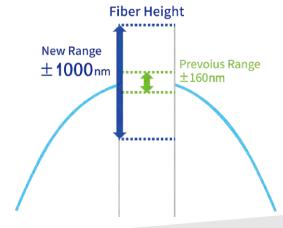
Facets of Multi Channel SM fibre



Facets of Multi Channel MM fibre

# Single Fiber Height

The new optical and mechanical design ectend the single fiber height range to  $-1000 \sim +1000$ nm, in all testing conditions.





# ◀ High repeat-ability

10 continuous testing results without plug-in and plug-out.

#### Repeat-ability of Fibre Height, 12 core MPO

MT Pro	Fiberheight											
ID	Fiber1	Fiber2	Fiber3	Fiber4	Fiber5	Fiber6	Fiber7	Fiber8	Fiber9	Fiber10	Fiber11	Fiber12
Unit	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)
Min	1393	1476	1523	1487	1486	1475	1466	1473	1451	1442	1452	1479
Max	1412	1492	1540	1499	1501	1490	1482	1488	1465	1456	1466	1489
MMD	19	16	17	12	15	15	16	15	14	14	14	10
Mean	1400.1	1482.2	1530.6	1492.3	1492.9	1481.5	1471.5	1479	1455.5	1446.7	1456.8	1482.5
1	1401	1482	1531	1492	1493	1481	1471	1479	1455	1447	1456	1482
2	1395	1478	1526	1487	1488	1475	1467	1474	1451	1442	1452	1479
3	1395	1479	1526	1488	1488	1479	1467	1476	1453	1445	1455	1481
4	1403	1485	1534	1497	1497	1487	1476	1485	1461	1452	1462	1489
5	1406	1488	1538	1499	1501	1490	1482	1488	1465	1456	1466	1489
6	1398	1479	1529	1489	1491	1479	1469	1477	1453	1444	1454	1480
7	1395	1478	1526	1491	1490	1480	1470	1477	1454	1445	1456	1481
8	1393	1476	1523	1488	1486	1476	1466	1473	1452	1443	1454	1480
9	1412	1492	1540	1497	1499	1484	1472	1478	1452	1443	1452	1479
10	1403	1485	1533	1495	1496	1484	1475	1483	1459	1450	1461	1485

#### Repeat-ability of Fibre Core Dip, 12 core MPO

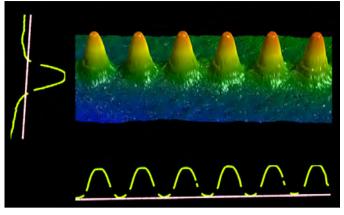
MT Pro	CoreDip											
ID	Fiber1	Fiber2	Fiber3	Fiber4	Fiber5	Fiber6	Fiber7	Fiber8	Fiber9	Fiber10	Fiber11	Fiber12
Unit	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)	(nm)
Min	41.00	53.00	51.00	39.00	53.00	37.00	48.00	45.00	35.00	43.00	41.00	53.00
Max	48.00	61.00	61.00	56.00	68.00	54.00	59.00	59.00	47.00	50.00	51.00	59.00
MMD	7.00	8.00	10.00	17.00	15.00	17.00	11.00	14.00	12.00	7.00	10.00	6.00
Mean	45.90	57.40	57.00	49.50	60.00	46.60	54.90	51.90	39.20	47.40	45.50	56.50
1	48	61	57	54	60	47	59	53	37	49	51	58
2	45	53	54	56	53	53	56	51	40	49	44	55
3	48	58	60	48	68	45	55	54	39	50	45	57
4	47	59	57	49	61	45	58	53	40	49	46	56
5	41	56	51	48	56	37	53	45	38	43	41	55
6	46	57	58	56	59	48	57	50	38	46	45	58
7	48	60	59	43	66	50	52	57	38	48	46	56
8	44	53	61	46	60	54	48	59	40	48	47	59
9	46	61	56	56	58	48	57	49	47	47	46	58
10	46	56	57	39	59	39	54	48	35	45	44	53



# Accurate testing result

Each MT Pro system is calibrated with 0.1nm laser interferometer. The accuracy and consistency are committed for the key parameters for MT/MPO measurement, including ROC, Fibre height and Core dip.

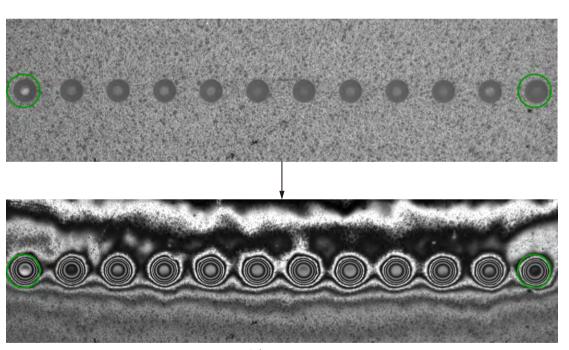
#### Almost identical Coredip value and fiber morphology



Coredip (nm)

# Auto focus

MT Pro can be configured to start a measurement from Auto Focus function. The Auto Focus function can eliminate the difference on each fibre channels. Further more, with Auto Focus function, the measurement procedure is significantly simplified, especially for APC connectors.



**Quick Auto Focus** 

## Auto calibration with reference mirror

MT Pro applies reference mirror to calibrate the instrument automatically and maintains the peak performance at all conditions. Compared with manual tuning stage and data compensation, the auto calibration is quick and accurate.

Fast and accurate calibration



## Unique Frame Mounting Fixture for MT Ferrule

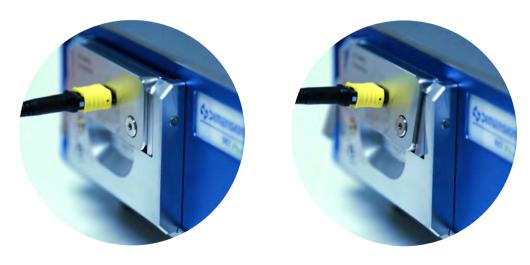
Dimension uses its patented frame mounting fixture to hold the MT ferrules to be tested.



- 1.The frame mounting fixture for MT ferrule is compatible with MT4, MT8, MT12, MT16,MT24, MT32, MT48 and MT72. Only one fixture is needed to test all MT ferrules.
- 2. Committed accuracy and repeat-ability for Ferrule angle measurement .
- 3. Endurable and long life time fixture.
- 4. Safe to PIN hole of DUT.
- 5. Helpful to analyze the accuracy of polishing jig.

# Quick switch between 0° and 8° fixtures

With the special designed fixture platform, 0° and 8° fixtures can be switched quickly. No extra calibration is needed. The high repeat-ability and reproducibility are guaranteed. The fixture platform is compatible for all types of MT/MPO PC and APC products.

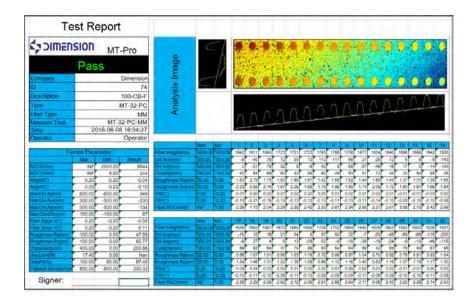


Quick switch between PC and APC



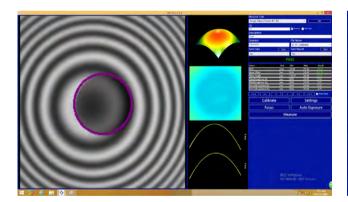
## One click operation

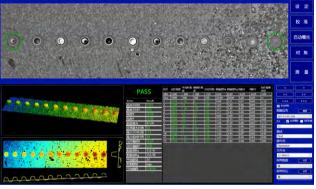
Only one clicking is needed to complete the whole measurement procedures, including auto focus, scanning, analysis and all calculations. The testing report will be ready in seconds.



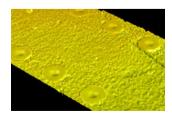
## Intuitive software interface and excellent 3D rebuilding

MT Pro applies intuitive and modularized software interface. The real time image, 3D profile, cross section, roughness and testing results are displayed in the user interface. The operation and configuration are convenient and user-friendly. Single/Multi-Channel measurement with one-click switching.

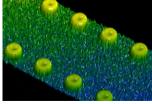




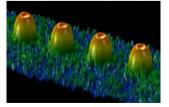
The details of the 3D profile visualize the polishing result and helps to analyze and improve the polishing process.



End face polishing and damage



Large Core dip



Slight Core dip



Core dip in SM



## Quick measurement

The MT Pro hardware and software design improves the speed for MPO measurement. It takes only 0.5 second for single fibre measurement or 5 second for 12 core MPO measurement.







MTPro\_MTP-16 Connector



MTPro\_MT ferrule X16(PIN positioning) MTPro\_MT ferrule X12(PIN positioning)





MTPro\_MTP/MPO Connector



MTPro LC



MTPro SC

# Specifications

Ltem		Range	Repeatability	Reproducibility				
	X/Y ROC*(mm)	3~Flat	0.3%	0.5%				
MT Mode	X/Y Angle* (°)	0(PC) or 8(APC)	±0.01	±0.02				
	Fiber Height* (um)	-2 — +8	±0.015	±0.025				
	CoreDip* (um)	-1~+1	±0.01	± 0.015				
	ROC* (mm)	3~∞	±0.1%	±0.2%				
Single Mode	Fiber height* (nm)	-1000~+1000	±1	±2				
	Apex Offset* (um)	0~200	±0.5	±1.5				
	APC Angle* (°)	0 or 8	±0.01	±0.015				
MPO	Testing time(s)	5s (MT12)						
Single Fil	per Testing Time(s)	0.5 s						
		MTP/MPO PC (Without PIN & With PIN)						
		MTP/MPO APC (Without PIN & With PIN)						
Con	npatible Devices	MT Ferrule PC (Without PIN & With PIN)						
		MT Ferrule APC (Without PIN & With PIN)						
		Single Fiber(FC、SC、ST、LC、MU、E2000PC&APC)						
Ima	age Resolution	1.5um						
Light Source		White Light +Dual monochromatic light source						
Power Supply		DC 24V						
	Weight	5.22kg( mainbody )						
	Size	264mmx157mmx107mm						

Remarks: \*Repeatability and Reproducibility are sigma values. Repeatability, measure 10 times without moving connectors. Reproducibility, measure 10 times with pull and plug.

Dimension Technology Co.,Ltd

Tel: +86 755-26480850

Email: sales@dimension-tech.com Web: www.dimension-tech.com