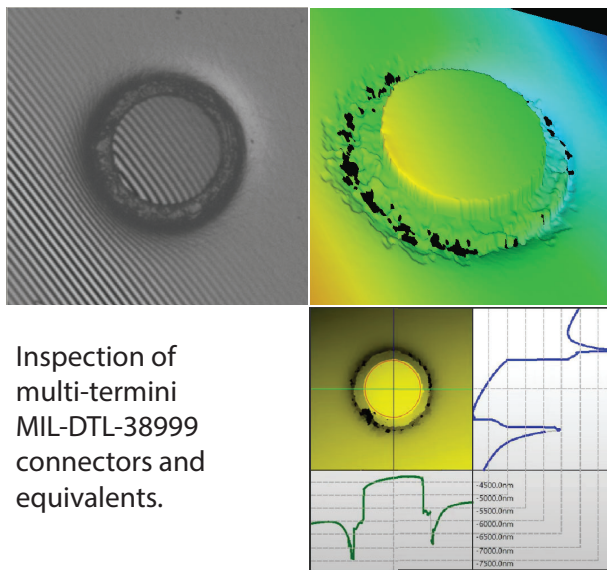


Octopus 2

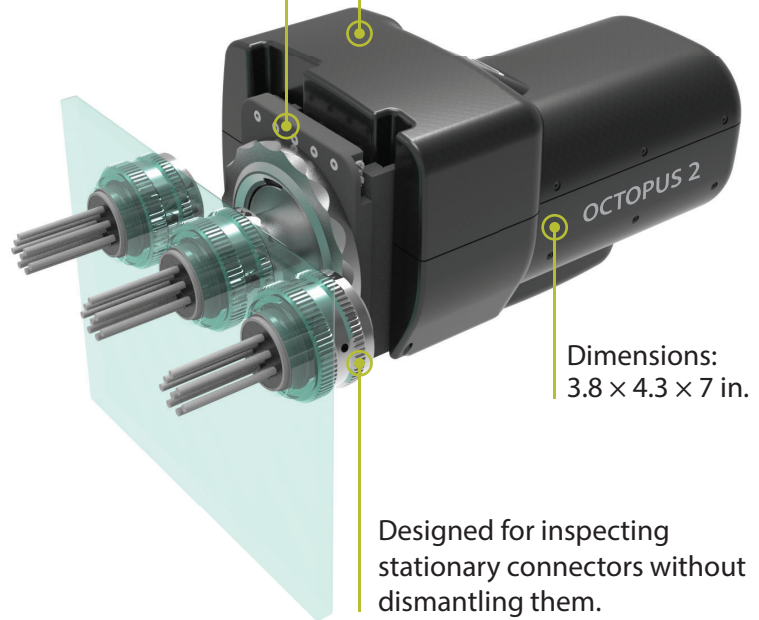
**Robotic interferometer
for maintenance inspection of multi-termini fiber optic connectors.**

Automated focusing and movement from one terminus to another in a multi-core connector.

Compact handheld design for limited space applications.



Inspection of multi-termini MIL-DTL-38999 connectors and equivalents.



Dimensions:
3.8 × 4.3 × 7 in.

Designed for inspecting stationary connectors without dismantling them.

**Inspect mounted MIL style connectors in 3D.
Ensure reliability and accurate performance of a critical connection.**

End face inspection is vital for MIL style connections in mission-critical systems subjected to vibration, temperature changes, and other harsh conditions.

A mere 2D assessment of a terminus end face won't suffice for critical applications. Interferometry is essential to:

- Provide 3D information on a defect that can't be removed by cleaning;
- Identify fiber chips and cracks;
- Monitor fiber height to prevent mating issues.

The Sumix OCTOPUS 2 robotic interferometer employs a multi-axis motion system for thorough geometry inspection of fiber optic termini in military and harsh environment connectors installed in aircraft or marine vessels' patch-panels, server boxes, and other optical-network units.

PATENTED

Application

- Aerospace, marine and military vehicle field service;
- On-site inspection in harsh environments like oil & gas, backbone telecom etc.

Specification

Connectors inspected: MIL-DTL-38999 and other MIL style and harsh environment connectors

Field of view: D = 1.6 mm

Area covered: Y, X-axis motion: ± 12.5 mm

Optical resolution: 3.2 μm

Magnification: 300×

Focus: Autofocus

Focus range: 6 mm

Measurement mode: white light

Data transfer and power: USB 3.0 cable, 12 V DC power adapter

Dimensions (H × W × L): 97 × 110 × 176 mm (3.8 × 4.3 × 7 in)

Weight: 1.3 kg (2.86 lbs)

Compatible with: desktop PC, laptop, tablet

Operating system: Windows 10

NIST traceable factory calibration

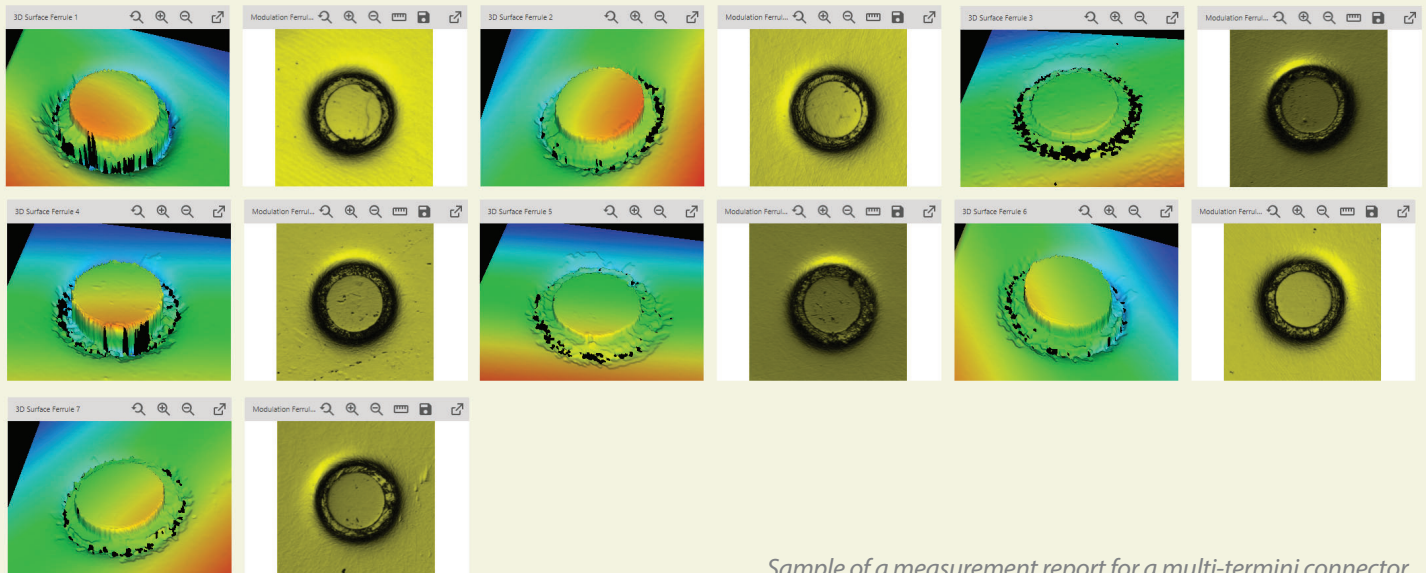
Capabilities

- Fiber Height and Radius of Curvature measurement
- 3D anomalies detection.

Name:	Result7747
Date & Time:	4/14/2021 10:42:7 AM
Task name:	Miniinterferometer SF scenario.
Device SN, Fixture SN:	MINI 65003
Connector ID:	
Customer:	
Technician:	Mykola
Company:	Sumix

FIBERS

Measurement Parameter	Units	Pass/Fail Limits		Fiber Number / Measured Value / Verdict							
		Min	Max	1	2	3	4	5	6	7	
Height	nm			1571.92	2192.13	1343.22	1692.61	1614.40	2556.26	1728.28	
ROC	mm			17.56	8.08	8.85	3.02	15.78	16.27	4.89	



Sample of a measurement report for a multi-termini connector