

# ODU0

## Verifies GigE Clients in OTU1/OTU2 Signals



### Key Benefits

- Verifies the correct configuration of the node and the function of the line card and optics
- Takes SLA measurements of Ethernet services directly inside the OTN without requiring an Ethernet port

### Intended Audience

- Central Office and Metro technicians who install, turn up services, and troubleshoot faults for optical transport network (OTN) circuits
- Engineers who maintain, troubleshoot, and evolve OTNs

### Applications

- Troubleshooting of Gigabit Ethernet clients in OTU1 and OTU2 signals

### Solution Description

The ODU0 test options for the T-BERD/MTS-6000A and 8000 MSAM enables generating and analyzing a Gigabit Ethernet client signal or a bit error rate test (BERT) signal inside an OTU1 (2.7G) or OTU2 (10.7G) interface as well as full line rate OTN signals at line rates 2.7G (CTOTU1) and 10.7G (CTOTU2). The tester can measure embedded bit error rates inside the ODU0 payload. Alternatively, it generates Ethernet Layer 2/Layer 3 traffic (single stream) and can measure for packet loss, throughput, and jitter inside an OTU1/OTU2 interface.

### Value Proposition

Operators can now use ODU0 to cost-effectively transport a Gigabit Ethernet service over OTNs without requiring an Ethernet aggregation switch (1G to 10G) or EoS node (multi-service provisioning platform, MSPP). The ODU0 option lets users analyze Ethernet signals directly inside an OTU1/OTU2 interface, enabling them to verify Ethernet service level agreements (SLAs) within the OTN cloud without requiring an Ethernet drop port at the OTN node. This option can also help users verify the correct configuration of ODU0 channels inside of OTU1/OTU2 signals.

T-BERD®/MTS-6000A and 8000 MSAM

CTODU0(-U1)

Ordering Information

Use Case

Verifying GigE clients in OTU1/OTU2 signals

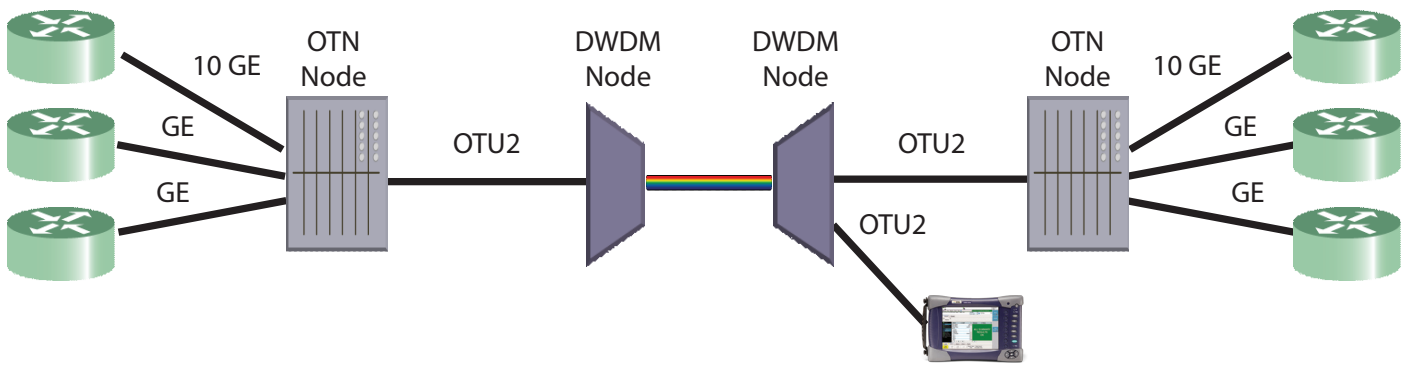
Please also refer to the OTN feature brief for information about generic OTN applications.

## Feature/Benefit Summary

Feature	Description	Advantage	Benefit
ODU0 BERT generation/analysis	Generates BERT signals inside an ODU0 that is embedded in an OTU1 or OTU2 interface	Verifies the mapping of the ODU0 client inside of OTU1 or OTU2 interface	Verifies the correct configuration of the node and the function of the line card and optics
ODU0 Layer 2/ Layer 3 traffic generation/analysis	Generates and analyzes Layer 2/ Layer 3 single-stream traffic	Verifies Layer 2/ Layer 3 SLA inside OTU1/ OTU2 payloads	Takes SLA measurements directly inside the OTN without requiring an Ethernet port

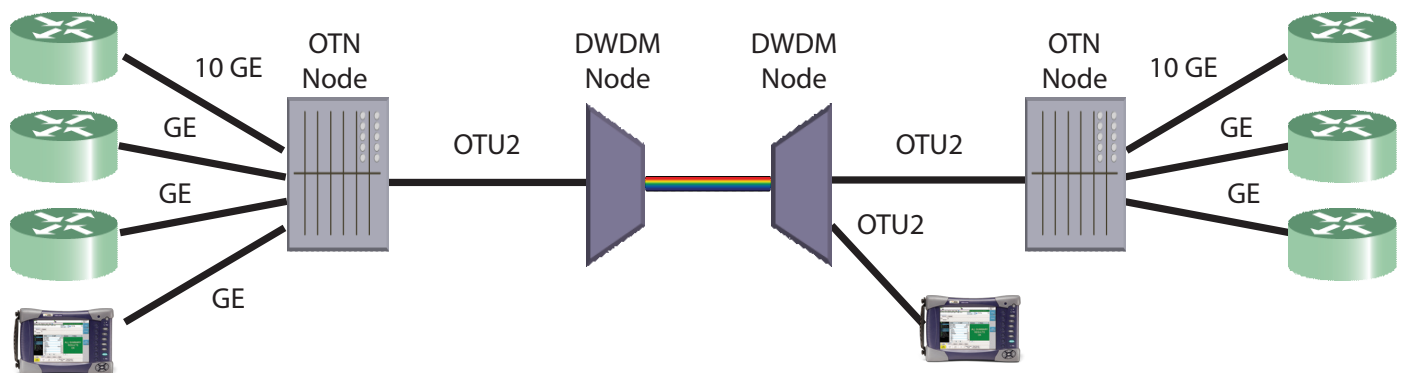
### Use Case: Ethernet Layer 2/Layer 3 Monitoring/Troubleshooting

The T-BERD/MTS-6000A and 8000 MSAM can be used to analyze Layer 2 and Layer 3 SLA at OTU1 or OTU2 ports in the transport network, which will simplify troubleshooting of Ethernet services when the OTN is used for efficient transport of Ethernet services inside one- or multi-operator networks.



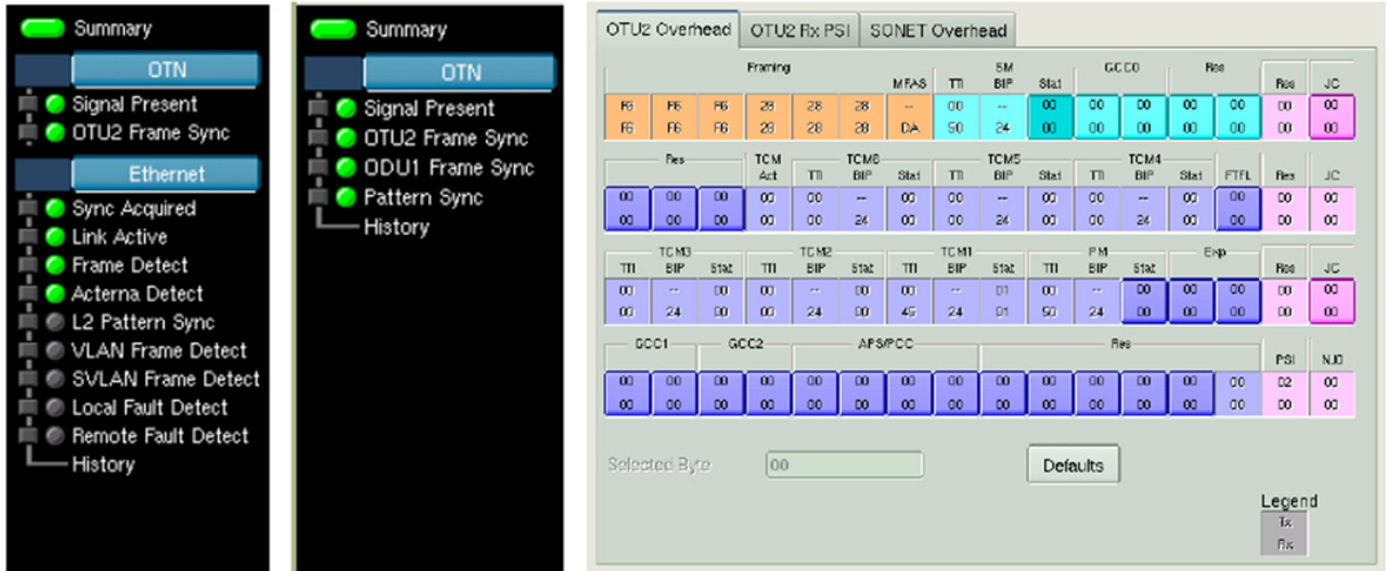
### Use Case: Ethernet Muxing/Wrapping Test

Using two T-BERD/MTS-6000A and 8000 MSAMs enables operators to verify the correct mapping of Ethernet signals inside of OTNs and identifying misconfiguration of ODU channels.



### Simplified, Multi-Layer Ethernet and OTN Setup/Result Overview

Simultaneously displaying OTN and Ethernet results allows customers to verify the quality of transport and service layer without switching between two different views.



### FAQ

**Q: Can ODU0 option be upgraded in the field?**

A: Yes/No, OTN options on the T-BERD 6000A MSAM Version 2 units allow for field upgrades. However, MSAM Version 1 units cannot be upgraded in the field and must be returned to the factory to upgrade to the MSAM Version 2.

**Q: Are there prerequisites for this feature?**

A: Yes, this option only works on MSAM Version 2 (dual port) chassis but only works on port 1. This option does not support adding tests on the second port.

**Q: Is this option available for OTU1 or OTU2 test interfaces?**

A: Yes, both.

**Q: Does this option support dual-stage muxing (ODU0 in ODU1 in ODU2)?**

A: No, however, we are considering the addition of dual-stage muxing for a future field upgrade.



North America  
Tel: 1 866 228 3762  
Fax: +1 301 353 9216

Latin America  
Tel: +1 954 688 5660  
Fax: +1 954 345 4668

Asia Pacific  
Tel: +852 2892 0990  
Fax: +852 2892 0770

EMEA  
Tel: +49 7121 86 2222  
Fax: +49 7172 86 1222

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