



SMITH'S OPTICAL TESTING PROGRAM



SMITH'S TEST LAB ALLOWS OUR CLIENTS TO SAVE MONEY WITHOUT SACRIFICING QUALITY AND RELIABILITY.

New standards in high-speed Ethernet, Fibre Channel, SONET, and OTN require increasingly stringent testing. Smith meets these needs for Fortune 500, telecom companies, and data centers worldwide by using our state-of-the-art lab to ensure that our optics are fully compliant within their environment. Testing is the cornerstone of Smith's success.

We test our optics at every major point along the production line – from auditing contract manufacturing facilities to advanced functional, platform, and network testing upon arrival at our testing laboratory.

SMITH'S TESTING CAPABILITIES INCLUDE:

TRANSCEIVER PERFORMANCE TESTING

ETHERNET TESTING

FIBRE CHANNEL TESTING

eCPRI TESTING

SDH/SONET TESTING

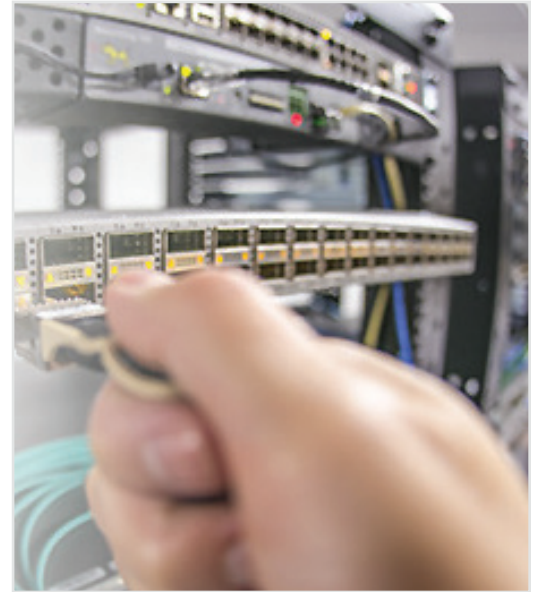
TRANSCEIVER PERFORMANCE TESTING

Each module Smith ships undergoes a rigorous testing process before programming, including:

- Distance compliance verification
- Traffic density
- Wavelength

ETHERNET TESTING

- Optical Ethernet testing (100 Mbps to 100 Gbps, including 25GE, 50GE, and 100GE)
- Electrical 10/100/1,000 Mbps Ethernet testing
- Dual-port testing capabilities
- Multi-stream testing of up to 32 independent streams
- PCS layer testing with Skew generation and monitoring
- Optical Lane BERT and CAUI-4/XLAUI Lane BERT
- IEEE 802.3ah, IEEE 802.1ag, ITU-T Y.1731, and MPLS-TP OAM support
- RS-FEC support for SR4 and SR10 transceivers
- Q in Q (VLAN stacking), MPLS, MPLS-TP, PBB, EoE support
- MAC flooding
- RFC2544 and V-SAM (Y.1564) testing
- IPv4 and IPv6 traffic generation
- BERT and throughput testing at layers 2 and 3
- Smart loopback mode for layers 2 and 3
- One-way-delay latency measurement (GPS assisted)
- Error and alarm injection
- Line-rate packet capture



FIBRE CHANNEL TESTING

- BERT and throughput testing
- Storage area network (SAN) testing for 1G, 2G, 4G, 8G, 10G, 16G, and 32G interfaces
- RFC2544: Throughput, latency, frame loss, back-to-back tests with layer 1 and layer 2 loopbacks

eCPRI TESTING

- 25G eCPRI
- RS-FEC support
- Dual-port testing capabilities
- Multi-stream testing of up to 32 independent streams
- Throughput testing at layers 2 and 4
- Pv4 and IPv6 support
- Q in Q (VLAN stacking) and MPLS support
- High accuracy one-way-delay latency measurement (GPS assisted)
- Line-rate packet capture

OTN TESTING

- OTN testing (OTU1, OTU2, OTU1e, OTU2e, OTU3, and OTU4)
- Full multistage mapping and multiplexing
- Ethernet over OTN (EoOTN)
- Advanced multistep map and mux with SDH/SONET/PDH/DSn test payloads
- ODUflex into ODU2, ODU3, and ODU4 with bulk payload
- Service disruption time (SDT)
- Overhead monitoring and generation
- Tandem connection monitoring
- Per-lane optical power and frequency measurements
- Terminate, payload through, and line through test modes
- Histogram analysis
- External clock reference interface

SDH/SONET TESTING

- Available as line rate or mapped into OTN payloads
- STM-0 to STM-64 and STS-1/OC-1 to OC-192
- Advanced multistep map and mux with PDH/DSn test payloads



SMITH HAS ONE OF THE INDUSTRY'S MOST COMPREHENSIVE ENVIRONMENTAL TEST LABS, INCLUDING:

3Com

2928
2948-SFP PLUS
3870-24
4500G-24
7450

Accedian

AMN-1000-TE-SH
AMN-1000-GT-S

Adtran

NetVanta 838
NetVanta 1534P
NetVanta 1550
NetVanta 1638
Opi-6100
Total Access 5006

ADVA

FSP150CCF
FSP150CC-825F

Alcatel

1850 TSS-3
OmniSwitch 6400
OmniSwitch 6850-U24X
OmniSwitch 6250-8M
6250
7360
7210 Service Access Switch
7750 Service Router (SR)

Arista

DCS-7040T-4S
DCS-7050S-64
DCS-7124S
DCS-7250QX-64-R
DCS-7280SE-68
7060PX4-32
7060DX4-32

Avaya

VSP 8404
VSP 9000
USP-8404C

Brocade/Foundry

5100
FastIron FCX624S-POE
FastIron GS648P-POE
FastIron SuperX Silkorm
200E
G-620-FS
Silkorm 3200
NetIron MLX-8
TurbolIron 24X
ICX 6450
ICX 7450
ICX 7750
VDX 6710
VDX 6740

BTI

700 Series
800 Series

Calix

B6
E7

Ciena

CN-3930
CN-3960
CN-6500
LE-310

Cisco

1841
2811
2921
2940
2960G
3500XL
3560
3560 E
3600
3750X
3845
3900
3925
4500X
4948E
4948-10GE
6500
6503
9120
9500
ASR920
ASR1002F
ASR9001
CE500
CRS-1
MDS-9020
MDS-9120
MDS-9148
IE-3000
IE-3010
ME2400
ME3400
NCS-5001
Nexus 2248PQ
Nexus 3064PQ
Nexus 3232C
Nexus 5010
Nexus 5548P
Nexus 6001
Nexus 7004
Nexus 92160
Nexus 9396
WS-C4948
ONS-15454
ONS-15310
CTX 2500
CE-MR-6

Cyan

Z22

Dell/Force10

PowerConnect 2824
PowerConnect 5324
2824
S60
SA-01-GE-48T
S-50-01-GE-48T-AC
S4810

EMC

DS-24M2

Enterasys

A2H124-24
C5G124-24P2
C5G124-48P2

Ericsson

SP 210

Extreme

200-24
Summit X650-24
Summit 4851
X450-48T

Gigamon

GigaVUE-MP

H3C

A5120
S5500
S5820X

HP

2520-8 PoE
2810-48G
2824
4200VI
5406ZL
J8707A
J9536A
J9309A
J8705A
5900AF-48XG-4QSFP+
ProCurve 2510 - J9020
ProCurve 2910
ProCurve 3500YL - J8692A
ProCurve 5900
ProCurve 6600-24G-4XG
StorageWorks 4/8 & 8/8
StorageWorks 2/16
Virtual Connect Flex-10

IBM

BladeCenter 46C7191
Blade Network G8000
Blade Rack Switch G8124
Blade Rack Switch G8264T

Intel

XL710-QDA2(40G)
XL710-QDA1(40G)
XXV710-DA2 25G
X520-DA2(10G)

Juniper

EX3200
EX3300
EX4200
EX4300
EX4600
SRX-1500
SRX650
MX80
MX240
QFX 3500
QFX 5100
QFX-5120
QFX-5200
QFX 10002

Linksys

SGE2000
SPS208G

McDATA

ED-6064

Mellanox

ConnectX-4 MCX4121A-ACAT 25G

NETGEAR

GS724T
GS752TXS

Nortel

2526T
4526GTX-PWR
470-24T
6500

Overture

ISG 400
ISG 5000

QLogic

SANbox 3810
SANbox 5600

Sun Microsystems

Sun Ray 2FS

Telco Systems

T-Marc 280
T-Marc 3348S

DASAN Zhong Solutions

M4200



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Smith offers a full line of transceivers, cables, DACs
(available in passive, active twinax, and active optical),
fiber TAPs, and cable management systems.