

AXS-200/805/855

part of the SharpTESTER Access Line

NETWORK TESTING—TRANSPORT AND DATACOM



The industry's first all-in-one handheld solution for dual E1/DS1, DS3, ISDN PRI and Ethernet testing

Whether for mobile backhaul, TDM/ISDN or Ethernet commercial services testing, the AXS-200/855 streamlines processes and seamlessly transitions from E1/DS1, DS3 or PRI circuits, to a full suite of Ethernet performance test functionalities without swapping modules or test units—using a single preloaded software package.

- Compact, lightweight platform purpose-built for harsh field environments
- Eliminates errors in data interpretation with radically simple, intuitive interface
- Validates test results with real-time insertion of voice traffic using talk-set capability
- Increases technician efficiency by allowing to run up to three tests simultaneously
- Turnkey Ethernet testing, including simultaneous bidirectional RFC 2544, multistream traffic generation, BERT and intelligent autodiscovery for end-to-end single-technician testing



Global award for technology innovation in 1 and 10 Gigabit Ethernet testing

Next-Generation Network Assessment



EXPERTISE REACHING OUT

Market Realities

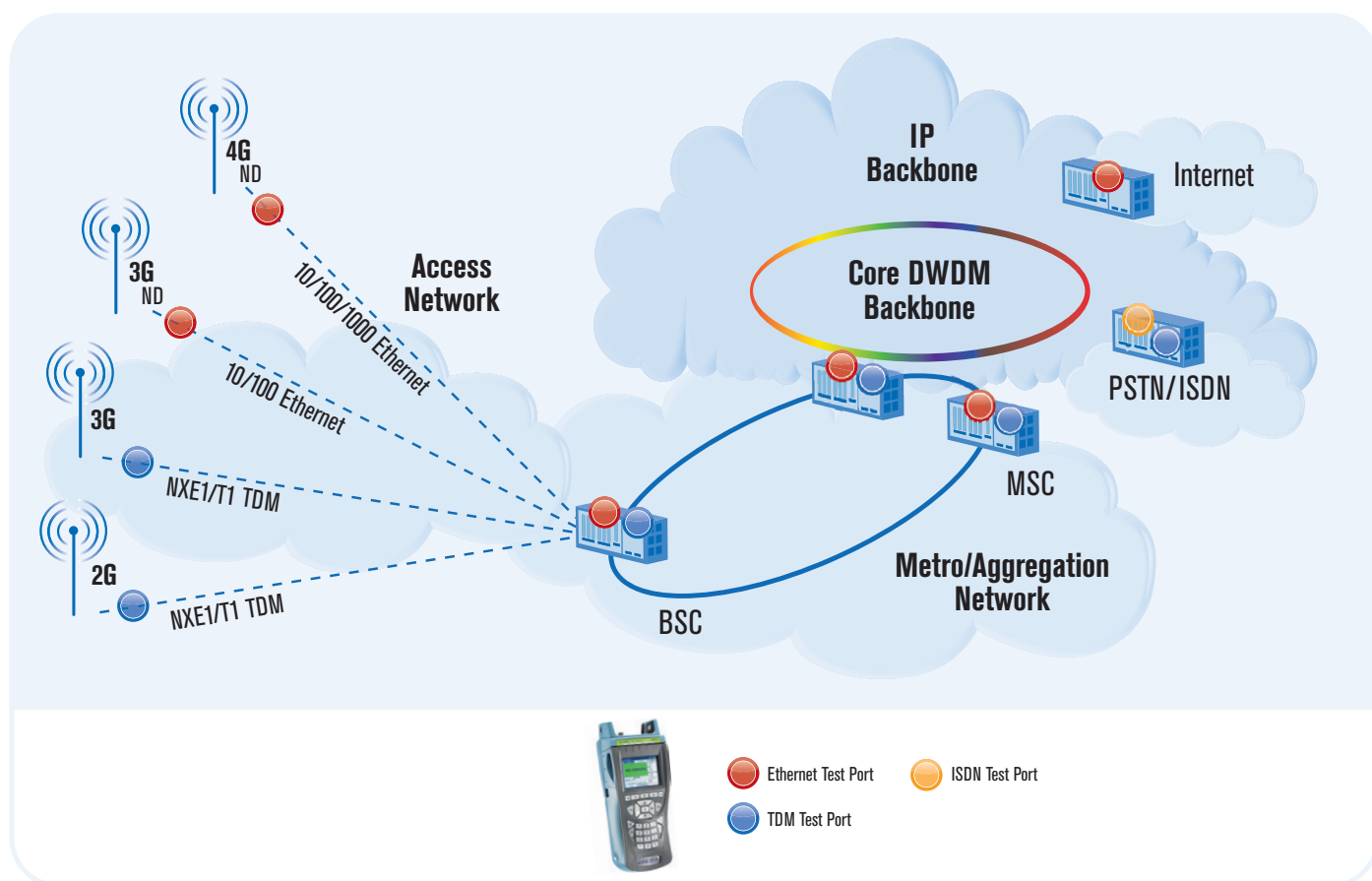
The ongoing proliferation of next-generation voice, data and video services continues to elevate the performance requirements of networks. But the reality remains that significant portions of existing networks are based on legacy technologies, including DSn (DS1/DS3), PDH (E1) and ISDN. While these technologies are continuously being overshadowed by the growth of Ethernet, they continue to provide substantial value in supporting relevant, revenue-generating services—whether they be mobile backhaul, ISDN dial-up or TDM/Ethernet services.

This reality demands a testing solution that seamlessly adapts to either operating environment (legacy or next-generation)—without sacrificing performance, speed or cost—in order to guarantee performance and quality of service (QoS) metrics.

The Powerful AXS-200/855: Simplifying Multilayer Access Testing

The industry's first all-in-one handheld solution for dual DS1/E1, DS3, ISDN PRI and Ethernet testing, the AXS-200/855 provides field technicians with unsurpassed, radically simple multilayer access testing in a lightweight, rugged unit optimized for fast, straightforward testing.

The AXS-200/855 offers field technicians a single unit to perform comprehensive DSn/PDH and ISDN PRI testing, as well as turnkey Ethernet test functionalities, including simultaneous bidirectional RFC 2544, traffic generation/monitoring, multistream QoS assessment, BERT and IP connectivity tools such as ping and traceroute. Switching from one application to the other is a simple one-click process using the intuitive, graphical GUI; gone are the days of lugging around multiple modules, booting up multiple units, or aggravating software installations or upgrades.



EXFO's AXS-200/855 delivers an all-in-one mobile backhaul and TDM test solution.

DSn/PDH Testing Capabilities (DS1/DS3/E1)

Turning up DS1/DS3/E1 and fractional T1/E1 circuits is an everyday occurrence for today's service providers, whether to support mobile backhaul or commercial service applications. The AXS-200/855 offers unprecedented ease of use and unrivaled testing features for installing, maintaining and troubleshooting DSn/PDH circuits. Whether one or two circuits need to be tested, the AXS-200/855's unique independent testing feature allows field technicians to instantly configure the unit to match the services being installed and quickly certify that the circuits meet service-level agreement (SLA) performance objectives.

DS1/DS3 Key Features

- Dual independent DS1 tests
- Alarm/error insertion and detection
- Performance monitoring
- Performance testing at any fractional T1 rate; both contiguous and non-contiguous n x 64 kbit/s are supported
- VF analysis measures different tone levels
- Round-trip delay (RTD) measurements
- Support for automatic pattern detection and 12 different stress patterns
- DS1 in-band and FDL loopbacks
- HDSL PairGain and Adtran loopbacks
- Smart and intelligent repeater loopback sequences
- RBS monitoring
- CSU/NIU emulation
- Terminate, Monitor and Through mode
- Excessive zeros Tx and Rx
- DS1 drop
- FEAC control

E1 Key Features

- Dual independent E1 tests
- Alarm/error insertion and detection
- Performance monitoring
- Performance testing at any fractional E1 rate; both contiguous and non-contiguous n x 64 kbit/s are supported
- VF analysis measures different tone levels
- Round-trip delay (RTD) measurements
- Support for automatic pattern detection and 12 stress patterns
- CAS monitoring
- Simultaneous signaling state status of all 30 channels
- Terminate and Monitor mode
- Excessive zeros Tx and Rx

ISDN PRI Capabilities

Thanks to the optional ISDN PRI capabilities, technicians can test from the customer's premises and emulate their equipment. With any butt set or analog phone, users can simply talk and listen over the ISDN network. In an effort to make testing smooth and efficient, the AXS-200/855 PRI option also allows the ability to place/receive calls and hold active 23 or 30 channels so a technician can then selectively choose to talk, listen or run a BER test over any channel. Having Q.931 codes allows technicians to further troubleshoot the call setup and make sure that the call setup, maintenance and tear-down are properly carried out.

ISDN Key Features

- Make a call in either voice, raw data or 3.1 kHz audio
- Terminate one or all calls
- Auto routing of data calls to BERT test
- Talk set support allows users to use a butt set to talk on an active call
- Caller identification gives the call type, selected B channel, dialed number and caller's number
- Q.931 decoding shows how calls are established, maintained and terminated across the ISDN network
- Call/answer and hold all 23 or 30 channels for seamless testing
- NT (CO) and TE (PBX) emulation to isolate the network or CPE side

Ethernet Performance Testing

EXFO's AXS-200/855 Ethernet Test Set can be used to effectively install, qualify and troubleshoot metro Ethernet networks thanks to its powerful test capabilities.

Applications

- Performance assessment of carrier Ethernet services
- Installation, activation and maintenance of metro Ethernet networks
- Deployment of active Ethernet (point-to-point) access services

BER Testing

Signal integrity is generally expressed by the bit error rate (BER) value. When it comes to testing bit error rates, the AXS-200/855 has users covered, as it measures BER in various types of circuits and can effortlessly test end-to-end up to layer 4 networks.

RFC 2544 Testing

The industry-standard RFC 2544 benchmarking methodology defines a series of tests—throughput, latency, back-to-back and frame loss—allowing service providers to perform proper circuit and service-level agreement (SLA) validation.

Traffic Generation

Thanks to the AXS-200/855 traffic generation and monitoring tools, technicians can monitor the following key QoS statistics in real time: throughput, frame loss, sequencing, packet jitter and latency.

QoS Testing

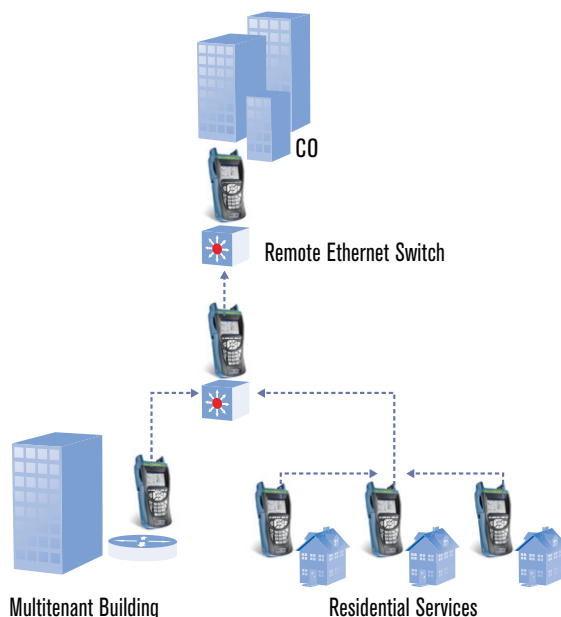
The AXS-200/855 is ideally designed for performing quality of service (QoS) verification on metro Ethernet circuits. It offers VLAN priorities and specific settings (types of service, differentiated services), helping service providers ensure QoS expectations are met.

IPv4/IPv6

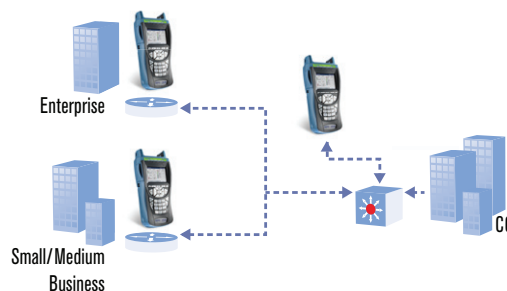
The proliferation of IP-enabled, always-on mobile devices is exhausting the available pool of IPv4 addresses, forcing service providers to rapidly transition their core, metro and backhaul networks to IPv6 addressing schemes. The AXS-200/855 test set offers complete Ethernet testing for both IPv4 and IPv6 deployments.

Cable Testing

With the help of the Wiremap test, field technicians can check for continuity problems as well as for MDI and MDIX compatibility. Also, knowing the length, distance to fault, propagation delay and skew further ensures that the physical cabling is within the IEEE 802.3 standard specifications.



■ Active Ethernet services.



■ Business services.



■ Metro Ethernet buildout.

Radically Simple QoS Testing

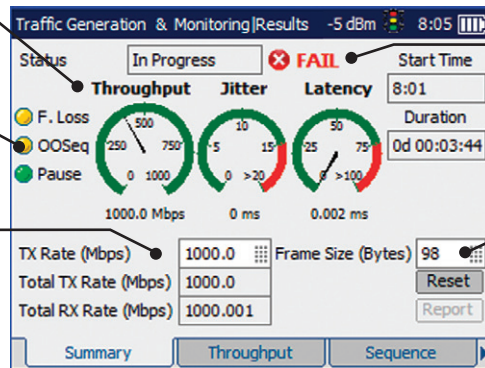
The AXS-200/855 traffic generation and monitoring tools make it fast and simple to test packet jitter, real-time latency, throughput, sequencing and frame loss. Speedometer-like gauges with built-in user-definable pass/fail thresholds give you immediate and accurate results at a glance—no need to shuffle through pages of information to find out why a test is failing. Frame loss, out-of-sequence LED indicators notify you of any current or historical defects. Whether incremental or large changes to the bandwidth or frame size are required, on-the-fly traffic generation adjustments are provided for quick and instant results without having to stop testing and look for other pages to make these adjustments.

Regardless of the network under test, it is always necessary to verify that it can handle the allocated bandwidth and expected QoS. With this critical data and simplified results page you can quickly and easily determine whether the network under test conforms to customers' expectations.

Throughput, jitter and latency visual pass/fail thresholds, analog gauges and digital readouts

Frame loss, out-of-sequence, pause frames

Real-time bandwidth adjustment

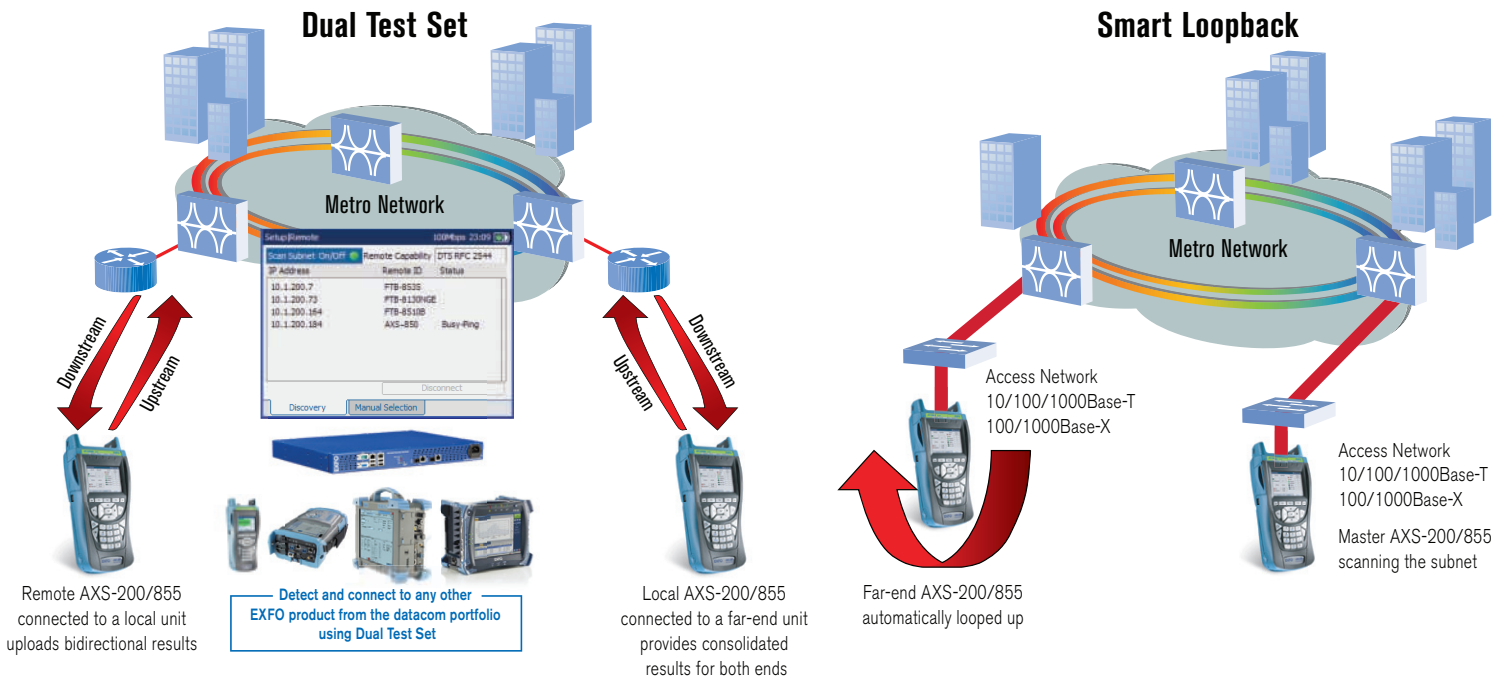


Overall pass/fail assessment

Real-time frame size adjustment

Intelligent Network Discovery Mode

Using an AXS-200/855, you can access multiple EXFO datacom remote testers. One click lets you scan the network and choose from a list of all available EXFO datacom testers on the network. Simply select the unit to be tested with and choose whether you want traffic to be looped back via Smart Loopback or Dual Test Set for simultaneous bidirectional RFC 2544 results. No more need for an additional technician at the far end to relay critical information—the AXS-200/855 takes care of it all.



Rugged, Lightweight and Designed for Front-Line Technicians

EXFO's AXS-200/855 Multilayer Access Test Set was designed according to the real-life challenges brought by Ethernet testing. Its user-friendly features shorten the learning curve for both expert and entry-level technicians and enable them to complete their test cycles quickly and efficiently.

Pass/Fail Testing

Thanks to built-in pass/fail thresholds, the AXS-200/855 delivers clear-cut assessment of test results. What's more, thresholds can be modified for testing rate-limited services.

Results Display

Test results are presented according to three formats:

- Pass/fail results based on default or user-configured thresholds
- Sneak-peek results during tests
- Complete results down to their associated frame sizes

Event Logger

The Event logger functionality allows users to pinpoint exactly when and how their tests are failing. Key features include:

- Color coded events
- Broken pass/fail thresholds are presented with both the expected and duration of exceeded threshold values
- Pass/fail status is provided at the conclusion of the log
- Events displayed in full context such as Bit Error, Link Down, etc.

Quick Configuration Recall

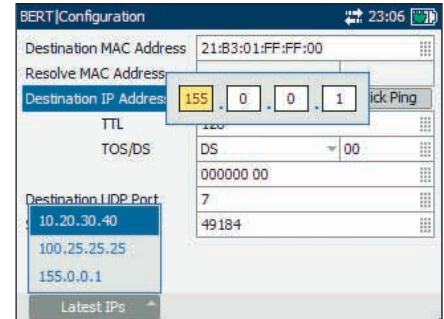
With the AXS-200/855, the user no longer needs to search for previously entered MAC or IP addresses. The AXS-200/855 remembers the last three IP and MAC addresses, allowing for an instantaneous entry of address information.

Print Report

The AXS-200/855 supplies users with a print report that contains complete test results, which can be viewed and saved internally or off the unit via a USB memory stick or network connection.

LED Indicators

Platform LEDs offer crucial information for pass/fail results, laser on/off, errors or alarms, test running and link status.



Quick configuration recall.

ID	Time	Event	Duration	Details
106	23 10:24:45 AM	Link Down	0d 00:00:23	Link Down
107	23 10:24:45 AM	Throughput > 80Mbps	0d 00:00:50	90.1Mbps
108	23 10:24:57 AM	Throughput < 10Mbps	0d 00:00:23	9.4Mbps
109	23 10:40:12 AM	Frame Loss	0d 00:00:12	186/186
110	23 10:42:45 AM	Frame Loss > 200	0d 00:00:05	15/201
111	23 10:45:45 AM	Latency	Pending	
112	23 10:45:54 AM	Test Stopped		Fail

Event logger.

Throughput	Completed	✓ PASS	Start Time
Back-to-Back	Completed <td>✓ PASS <td>0:08</td> </td>	✓ PASS <td>0:08</td>	0:08
Frame Loss	In Progress <td>✓ PASS</td> <td>Duration</td>	✓ PASS	Duration
Latency	--		0d 00:02:38
Step	1 Mbps		
Tx Frames	845		1267
Rx Frames	845		1267
1518	0.0 %	✓	0.0 %
128	Waiting		Waiting

Critical and fail-safe pass/fail diagnosis

Sneak-peek of current test running

LEDs offer crucial Ethernet test information

Directional arrows and function keys

Alphanumeric keypad



Specifications

DS1 SPECIFICATIONS

DS1 Receiver

Modes	Monitor, Terminate, Bridged, CSU/NIU emulation
Framing	ESF, SF, SLC96, unframed, auto detect
Line coding	B8ZS, AMI
Rx bit rate	1.544 Mbit/s \pm 300 ppm
Impedance	100 Ω nominal, bridged $>$ 1000 Ω
Rx level sensitivity	For 772 kHz: TERM: \leq 26 dB (cable loss only) at 0 dBdsx Tx DSX-MON: \leq 26 dB (20 dB resistive loss + cable loss \leq 6 dB) Bridge: \leq 6 dB (cable loss only) Note: Measurement units = dBdsx
Frequency measurement accuracy (uncertainty)	\pm 7 ppm
Electrical power measurement accuracy (uncertainty)	\pm 1.5 dB
Line events	LOS, OOF, AIS, RAI, UAS, CRC, BPV, F-bits, 1's D, ExZ
Patterns	Auto, QRSS, 3 in 24, 2 in 8, 1 in 16, 1 in 8, 1111, 0000, 1010, DALY, 2E15-1, 2047
PM stats	CNT, BER, ES, EFS, % EFS, SES, % SES
Loopbacks	NREM, NLOC, NDU1, NDU2, CREM, CLOC, CDU1, CDU2, ARM, HTUR, HTUC, NRE1, NRE2, CSU, NIU5 Smart repeater codes (ILR, IOR), Payload, Line, Network, Local, Self
Round-trip delay	Displayed in milliseconds (ms)
Timing slips	Count and deviation
Fractional T1	Contiguous and non-contiguous: N x 64

DS1 Transmitter

Modes	Terminate
Framing	ESF, SF, SLC96, unframed
Line coding	B8ZS, AMI
Tx bit rate	1.544 Mbit/s, \pm 32 ppm
LBO	0, -7.5, -15 and -22.5 dB
Error inject	Bit error, framing loss (2 F-bits) and BPV
Patterns	Auto, QRSS, 3 in 24, 2 in 8, 1 in 16, 1 in 8, 1111, 0000, 1010, DALY, 2E15-1, 2047
Loopbacks	NREM, NLOC, NDU1, NDU2, CREM, CLOC, CDU1, CDU2, ARM, HTUR, HTUC, NRE1, NRE2, CSU, NIU5 Smart repeater code (ILR, IOR), Payload, Line, Network, Local, Self
Standards	ANSI T1.403, AT&T Pub.62411, GR-499
Tx pulse amplitude	2.4 to 3.6 V

DS3 SPECIFICATIONS

DS3 Receiver

Modes	Monitor, Terminate, Through, DS1 Drop and Insert, Through no Gen
Framing	C-bit, M13, unframed, auto
Line coding	B3ZS
Rx bit rate	44.736 Mbit/s \pm 100 ppm
Impedance	75 Ω nominal
Rx level sensitivity	For 22.368 MHz: TERM: \leq 10 dB (cable loss only) DSX-MON: \leq 26.5 dB (21.5 dB resistive loss + cable loss \leq 5 dB) Note: Measurement units = dBm
Line events	LOS, OOF, AIS, RDI, IDLE, UAS, C-bit, BPV, F-bit, P-bit, FEBE, ExZ
Patterns	2E23-1, 2E20-1, 2E15-1, QRSS, 3 in 24, 1010, 1111, 1100, 1000
PM stats	CNT, BER, ES, EFS, % EFS, SES, % SES
FEAC codes	Displays any of 11 received FEAC codes
Frequency measurement accuracy (uncertainty)	\pm 7 ppm
Power measurement accuracy (uncertainty)	\pm 1.5 dB
Round-trip delay	Displayed in milliseconds (ms)
Fractional T1	Contiguous and non-contiguous: N x 64

DS3 Transmitter

Modes	Terminate, Through, Through no Gen
Framing	C-bit, M13, unframed
Line coding	B3ZS
Tx bit rate	44.736 Mbit/s \pm 20 ppm
Tx levels	DSX, DSX-HI
Error inject	Bit errors, F-bit, C-bit, P-bit, BPV, Ex-Zeros: single, burst and continuous
Patterns	2E23-1, 2E20-1, 2E15-1, QRSS, 3 in 24, Idle, 1010, 1111, 1100, 1000, AIS, RAI
Loopbacks	Local, CSU/NIU, FEAC, COT, COT (alternate-2), COT (alternate-1), DS3 Repeater
FEAC codes	Transmits any of 11 FEAC codes
Standards	G.703, G.775, T1.404, T1.102, T1.107, GR-499
Tx pulse amplitude	0.36 V to 0.85 V

E1 SPECIFICATIONS

E1 Receiver

Modes	Monitor, Term, Bridged
Framing	PCM30, PCM31, PCM30+CRC4, PCM31+CRC4, unframed
Line coding	HDB3, AMI
Rx bit rate	2.048 Mbit/s \pm 300 ppm
Impedance	75 and 120 Ω nominal, bridged > 1 k Ω
Rx level sensitivity	For 1024 kHz: TERM: \leq 6 dB (cable loss only) MON: \leq 26 dB (20 dB resistive loss + cable loss \leq 6 dB) Bridge: \leq 6 dB (cable loss only) Note: Measurement units = dBm
Frequency measurement accuracy (uncertainty)	\pm 7 ppm
Electrical power measurement accuracy (uncertainty)	\pm 1.5 dB
Timing slips	Count and deviation
Line events	LOS, OOF, AIS, UAS, CRC, CV, FAS, RAI
BERT stats	CNT, BER, ES, EFS, %EFS, SES, %SES
Patterns	Auto, QRSS, 3 in 24, 2 in 8, 1 in 16, 1 in 8, 1111, 0000, 1010, DALY, 2E15-1, 2047
Round-trip delay	Displayed in milliseconds (ms)
Fractional E1	Contiguous and non-contiguous: Nx64
Loopbacks	Local-NW, self-loop
Standards	FAS and CRC per ITU-T G.704, G.706

E1 Transmitter

Modes	Monitor, Term, Bridged
Framing	PCM30, PCM31, PCM30+CRC4, PCM31+CRC4, unframed
Line coding	HDB3, AMI
Tx bit rate	2.048 Mbit/s \pm 32 ppm
Error inject	Bit error, Auto E-Bit, Auto-AIS and Auto-RAI, BPV
Patterns	Auto, QRSS, 3 in 24, 2 in 8, 1 in 16, 1 in 8, 1111, 0000, 1010, DALY, 2E15-1, 2047
Fractional E1	Contiguous and non-contiguous: Nx64
Loopbacks	Local-NW, self-loop
Standards	FAS and CRC per ITU-T G.703, G.704, G.706

PRI ISDN SPECIFICATIONS

Receiver

Transport layer 1	DS1, E1
BERT stats	CNT, BER, ES, EFS, % EFS, SES, % SES
Transport framing	DS1: ESF, E1: PCM30+CRC4
Transport line coding	DS1: B8ZS E1: HDB3
Impedance	DS1: 100 Ω balanced, E1: 120 Ω balanced
Switch types	National ISDN 2, Nortel DMS-100, AT&T 4ESS, AT&T 5ESS Europe (ISDN, QSIG, VN6, 1TR6)
Country code	USA and Canada, Euro-ISDN, France, Germany
Call type	Voice, audio and data
Local number	Up to 16 digits
Single and multiple call terminations	Up to 23 channels DS1, 30 channels E1
B-Channel BERT	2047, 511, 1 in 1, 1111, 0000, 1010
Emulation modes	TE, NT
Layer 1 status	Link active, LOS, AIS, RAI
Layer 3 status	Q.931 decode, call code, progress code

Transmitter

Transport layer 1	DS1, E1
Transport framing	DS1: ESF, E1: PCM30+CRC4
Transport line coding	DS1: B8ZS E1: HDB3
Clocking	Internal, network/loop-timed
Switch types	National ISDN 2, Nortel DMS-100, AT&T 4ESS, AT&T 5ESS Europe (ISDN, QSIG, VN6, 1TR6)
Country code	USA and Canada, Euro-ISDN, France, Germany
Call type	Voice, audio and data
Dialed number	16 digits max., ability to store up to 10 numbers
Local number	16 digits max.
Single and multiple call terminations	Up to 23 channels DS1, 30 channels E1
B-Channel BERT	2047, 511, 1111, 0000, 1010
BERT error inject	Single bit error
Emulation modes	TE, NT
Layer 1 status	Link active, LOS, AIS, RAI
Layer 3 status	Q.931 decode, call code, progress code

OPTICAL ETHERNET SPECIFICATIONS

Optical interfaces	One port at 100M or GigE						
Available wavelengths (nm)	850, 1310 and 1550						
	100Base-FX	100Base-LX	1000Base-SX	1000Base-LX	1000Base-ZX	1000BASE-BX10-D	1000BASE-BX10-U
Wavelength (nm)	1310	1310	850	1310	1550	Tx: 1490 Rx: 1310	Tx: 1310 Rx: 1490
Tx level (dBm)	-20 to -15	-15 to -8	-9 to -3	-9.5 to -3	0 to +5	-9 to -3	-9 to -3
Rx level sensitivity (dBm)	-31	-28	-20	-22	-22	-20	-20
Maximum reach	2 km	15 km	550 m	10 km	80 km	10 km	10 km
Transmission bit rate (Gbit/s)	0.125	0.125	1.25	1.25	1.25	1.25	1.25
Reception bit rate (Gbit/s)	0.125	0.125	1.25	1.25	1.25	1.25	1.25
Tx operational wavelength range (nm)	1280 to 1380	1261 to 1360	830 to 860	1270 to 1360	1540 to 1570	1480 to 1500	1260 to 1360
Measurement accuracy (uncertainty)							
Frequency (ppm)	±15	±15	±15	±15	±15	±15	±15
Optical power (dB)	±2	±2	±2	±2	±2	±2	±2
Maximum Rx before damage (dBm)	+3	+3	+6	+6	+6	+6	+6
Jitter compliance	ANSI X3.166	IEEE 802.3	IEEE 802.3	IEEE 802.3		IEEE 802.3ah	IEEE 802.3ah
Ethernet classification	ANSI X3.166	IEEE 802.3	IEEE 802.3	IEEE 802.3		IEEE 802.3ah	IEEE 802.3ah
Laser type	LED	FP	VCSEL	FP	DFB	DFB	FP
Eye safety	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1	CLASS 1
Connector	LC	LC	LC	LC	LC	LC	LC
Transceiver type	SFP	SFP	SFP	SFP	SFP	SFP	SFP

ELECTRICAL ETHERNET SPECIFICATIONS

Electrical interfaces	One port 10/100Base-T or 1000Base-T Automatic detection of straight/crossover cable		
	10Base-T	100Base-TX	1000Base-T
Tx bit rate	10 Mbit/s	125 Mbit/s	1 Gbit/s
Tx accuracy (uncertainty) (ppm)	±15	±15	±15
Rx bit rate	10 Mbit/s	125 Mbit/s	1 Gbit/s
Rx measurement accuracy (uncertainty) (ppm)	±15	±15	±15
Duplex mode	Half and full duplex	Half and full duplex	Full duplex
Jitter compliance	IEEE 802.3	IEEE 802.3	IEEE 802.3
Connector	RJ-45	RJ-45	RJ-45
Maximum reach (m)	100	100	100

ETHERNET TESTING

RFC 2544	Throughput, back-to-back, frame loss and latency measurements according to RFC 2544. Frame size: RFC-defined sizes, user-configurable between 1-7 sizes.
Traffic generation and monitoring*	Capability to generate traffic and monitor Ethernet and IP networks. Capability to perform traffic shaping with the following statistics: throughput, frame loss, sequencing, packet jitter, latency, frame size, traffic type and flow control.
Multistream QoS testing*	Capability to transmit and monitor up to three additional streams over Ethernet and IP networks. Configurable per-stream analysis; capability to set packet size, MAC source/destination address, VLAN ID, VLAN priority, IP source/destination address, ToS field, DSCP field, TTL, UDP source/destination port and payload.
BERT	Up to layer 4 supported with or without VLAN Q-in-Q.
Patterns (BERT)	PRBS 2E9-1, PRBS 2E11-1, PRBS 2E15-1, PRBS 2E20-1, PRBS 2E23-1, PRBS 2E31-1 and one user pattern. Capability to invert patterns.
Bit error insertion	1-50
Error measurement	Jabber/giant, runt, undersize, FCS, symbol, alignment, collision, late collision, excessive collision.
Error measurement (BERT)	Bit error, bit mismatch 0, bit mismatch 1.
Alarm detection	LOS, link down, pattern loss, frequency.
VLAN stacking	Capability to generate streams with up to two layers of VLAN (including IEEE 802.1ad Q-in-Q tagged VLAN) traffic by VLAN ID or VLAN priority at any of the stacked VLAN layers.
Cable testing*	Category 5 cable (or better), 100 Ω UTP/STP cable, ≤120 meters.
Service disruption time (SDT) measurement	Includes pass/fail thresholds and statistics, such as "longest", "shortest", "lost", "average", "count" and "total".
IPv6 testing*	Includes BERT, RFC 2544, traffic generation and monitoring, background streams, Smart Loopback, remote loopback, ping and traceroute.

* Available as software options.

ADDITIONAL FEATURES

Optical power measurement	Supports optical power measurement at all times; displayed in dBm.
Remote loopback	Detects other AXS-200/855 and sets them into Smart Loopback mode.
Dual test set	Detects and connects to any of EXFO's datacom testers to perform bidirectional RFC 2544 testing.
Save and load configuration	Ability to store and load test configurations to/from a non-volatile USB memory stick.
Pass/fail analysis	Provides a pass/fail outcome with user-adjustable thresholds for all test results.
IP tools	Capability to perform ping and traceroute functions.
Smart Loopback	Capability to return traffic to the local unit by swapping packet overhead up to layer 4.
Report generation	Ability to generate test reports on the unit or exported via USB.
Event logger	Supports logging of test results with absolute or relative time and date, details and duration of events, color-coded events and pass/fail outcome.
Remote control	Remote control through VNC.

GENERAL SPECIFICATIONS

Size (H x W x D)	284 mm x 125 mm x 92 mm	(11 ³ / ₁₆ in x 4 ¹⁵ / ₁₆ in x 3 ⁵ / ₈ in)
Weight (with battery)	1.6 kg	(3.5 lb)
Temperature		
operating	0 °C to 50 °C	(32 °F to 122 °F)
storage	-40 °C to 70 °C	(-40 °F to 158 °F)
Relative humidity	0 % to 93 %, non-condensing	
Battery life (typical usage)	Up to 5 hours	
Battery charging time	2 hours from full discharge to full charge	
Language	English	

AXS-200/800 product family capabilities			
Capabilities	AXS-200/805	AXS-200/850*	AXS-200/855
Ethernet 10/100/1000 electrical 100/1000 optical	Not available	Available	Available
Dual Tx/Rx DS1	Available	Not available	Available
Dual Tx/Rx E1	Available	Not available	Available
DS3	Available	Not available	Available
ISDN PRI	Available	Not available	Available

* For more information on the AXS-200/850, please refer to the spec sheet on the AXS-200/850 product page at www.EXFO.com.

ORDERING INFORMATION

AXS-855-XX-XX-XX-XX

Models ■

AXS-855 = Ethernet 10/100 Base-T electrical
AXS-855-1 = Ethernet 10/100/1000 electrical and GigE optical

Interface options ■

DS1 = Dual DS1 Rx/Tx interfaces
DS1-DS3 = Dual DS1 Rx/Tx and DS3 Rx/Tx interfaces
E1 = Dual E1 Rx/Tx interfaces
E1-DS3 = Dual E1 Rx/Tx and DS3 Rx/Tx interfaces

PRI option ■

00 = Without support for PRI interface
PRI = Support for PRI interface

Ethernet software options

00 = Without software option
100Optical = Support for 100M optical interface ^a
GigE = Support for 1000Base-T and GigE optical ^a
Cable_test = Cable test
TRAFFIC_GEN = Traffic generation and monitoring test
MULTI_STREAM = Multiple streams ^b
IPV6 = Internet protocol version 6

Example: AXS-855-DS1-DS3-PRI-100Optical

Notes

- a. Requires purchase of SFP.
b. Available with TRAFFIC_GEN only.

AXS-805-XX-XX

Interface options ■

DS1 = Dual DS1 Rx/Tx interfaces
DS1-DS3 = Dual DS1 Rx/Tx and DS3 Rx/Tx interfaces
E1 = Dual E1 Rx/Tx interfaces
E1-DS3 = Dual E1 Rx/Tx and DS3 Rx/Tx interfaces

PRI option

00 = Without support for PRI interface
PRI = Support for PRI interface

Example: AXS-805-DS1-DS3-PRI

Complementary Products

AXS-200/850 Ethernet Test Set

Part of EXFO's wide-ranging Ethernet test offering, the AXS-200/850 delivers comprehensive, yet straightforward Ethernet/IP test functionalities. Whether for installing, turning up or maintaining Ethernet and IP services, the AXS-200/850 is ready to perform. For more information, please refer to the detailed spec sheet on the AXS-200/850 product page at www.EXFO.com.

RTU-310 IP Services Test Head

The RTU-310 enables carriers to ensure the reliability and performance of their Ethernet-based services. Its wide range of test functionalities provide all the necessary measurement tools for service turn-up, troubleshooting as well as service-level agreement (SLA) verification. For more information, please refer to the detailed spec sheet on the RTU-310 product page at www.EXFO.com.



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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

For the most recent version of this spec sheet, please go to the EXFO website at <http://www.EXFO.com/specs>

In case of discrepancy, the Web version takes precedence over any printed literature.