

TFN

PRI INTEGRATED

T5500A

10G Ethernet Tester

Ethernet Data

10G Ethernet Test ...





T5500A is an easy-to-use, 10G multi-service tester. It integrates IP-RAN/OTN, Ethernet and other transmission and data into a portable, high-performance and high-precision all-in-one test instrument, and integrates E1 and V.35 interface tests, supports 2M 30B+D, and is an all-in-one multi-service 10G instrument, thus providing units, operators, equipment suppliers, and communication engineering construction units with test tools for opening, maintaining and troubleshooting transmission networks, data networks, and synchronous networks.

Innovative Technology

FEATURES



✓ Dual-port IPRAN/OTN IPRAN and Ethernet test functions in one

✓ Dual-port independent configuration, simultaneous testing

✓ DATACOM data interface: 1 V.35/V.24 data test function

✓ 75 ohm unbalanced E1 interface: E1 link, compliant with G.703 (E1)

✓ 120 ohm balanced E1 interface: E1 link, compliant with G.703 (E1)

✓ Optical power interface: independent optical power meter interface

✓ VFL interface: independent VFL interface

✓ Fiber fault detection test, OTDR interface: independent OTDR interface

✓ Management network port: for remote control, data export

Ethernet Interface function

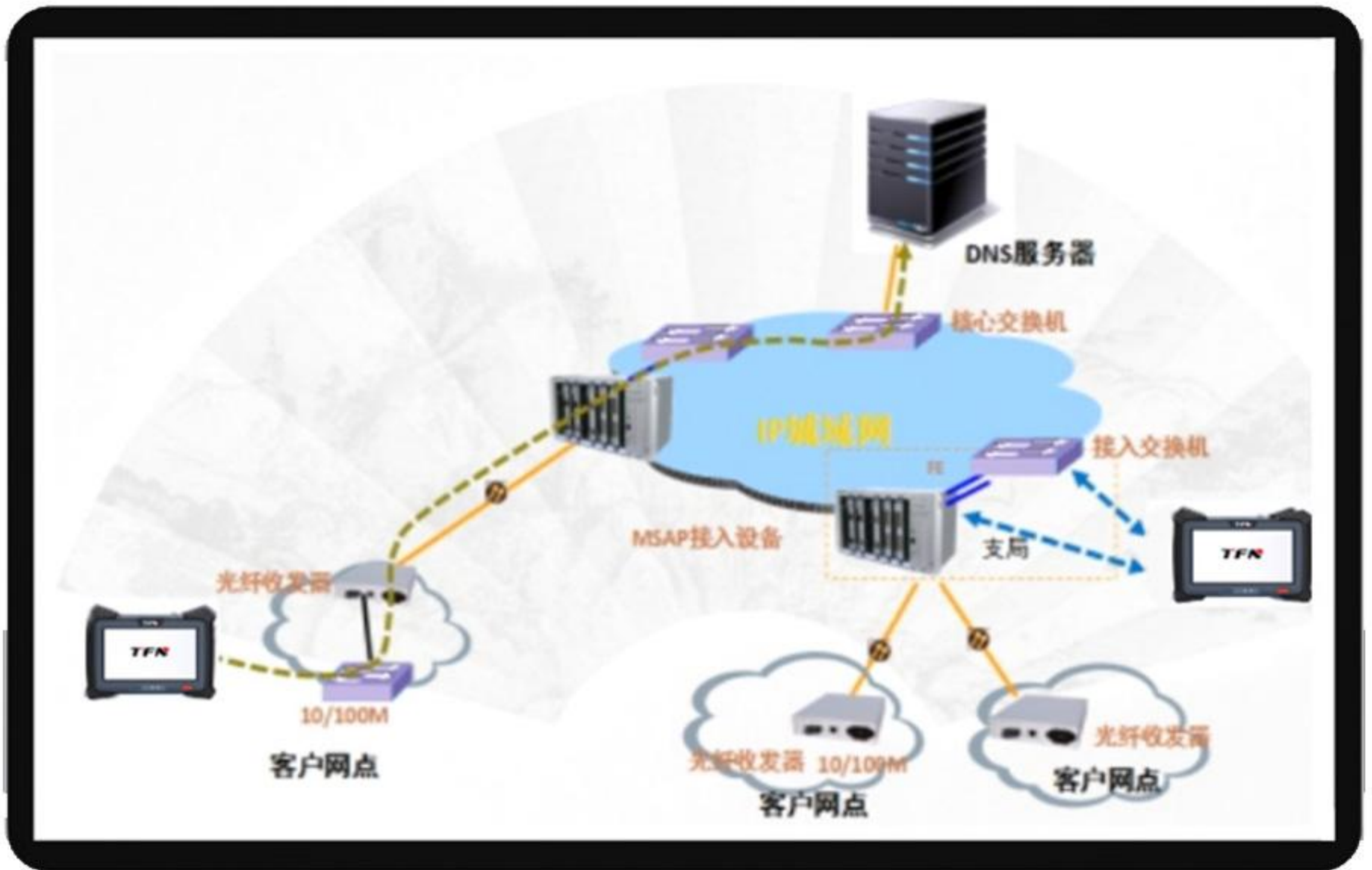
Includes two independent Ethernet interfaces, which can be configured as optical or electrical ports





1. Contains two independent Ethernet interfaces, which can be configured as optical or electrical port modes
2. Electrical port: 10/100/1000M adaptive
3. Optical port: 1000M/100M/10G can be set
4. MAC address can be configured
5. Support VLAN, VLAN number can be configured
6. Provide Ethernet link self-loop IP PING
7. Statistics of sending, receiving, error, packet loss and packet loss rate
8. Fixed speed PING, 1,10,100,200,500 frames/second
9. IP and VLAN discovery: capture and parse packets from ports, and parse VLAN numbers and IP addresses
10. Port loopback: support 1-4 layer loopback, respond to ARP requests, respond to ICMP requests; for IP packets of specific ports, MAC address source and destination exchange, IP address source and destination exchange
11. TCP delay test: TCPING test, can test the TCP response speed of the specified server port, including: SYN-ACK delay and FIN-ACK delay, accurate to microseconds
12. RFC2544 protocol: support UDP protocol and ICMP protocol
13. RFC2544 test frame length: support standard frame length 64, 128, 256, 512, 1024, 1518, and additionally supports JAMBO frames, 4000, 8000, 10000 bytes
14. RFC2544 packet loss rate, throughput, latency, back-to-back: support standard frames, JAMBO frames up to 10000 bytes
15. DHCP automatically obtains IP address; illegal DHCP service detection
16. ARP scanning; IP conflict detection
17. Route tracking: PING the remote IP device from the instrument to display the IP list of all routers on the path
18. Port positioning: Make the switch port indicator light of the network cable connected to the instrument flash, while the other switch port indicators are not affected
19. Bandwidth flow monitoring through mode
20. Broadcast storm monitoring

E1 Interface Function



1. 75 ohm E1 unbalanced BNC interface

2. 120 ohm E1 balanced RJ48 interface

3. Loop detection: Instantly detect whether the remote end of the circuit currently connected to the instrument has looped, and display it intuitively

4. Clock source, internal clock: 2.048MHz±5PPM, receiving: lock the receiving signal clock
5. Line coding: HD83 and AMI pulse waveform: compliant with ITU-T G.703
6. Frame format: non-frame, PCM31, PCM31C, PCM30, PCM30C
7. Clock selection: lock the receiving clock, or use the internal clock
8. NX64K configuration: N (continuous) and M (non-continuous) x 64KBPS (N&M=1 to 31)
9. Automatic detection of frame format and CRC
10. Automatic detection of NX64K time slot configuration, can detect occupied time slot number and unoccupied time slot number
11. Error test: code type 2E7, 2E9, 2E11, 2E15, 2E21, all 1, 0/1 alternating
- 12.E1 receive frequency measurement
- 13.CODE/BPV error (error count and ratio)
14. Frame error (FAS, MFAS and CRC-4 error count and error ratio)
15. LOS, SYNC loss, LOF, AIS, FAS, RAI and MFAS second count
16. G.821 analysis, G.826, M.2100/550 measurement, E-BIT error count and ratio
17. Error insertion: bit error, line error
18. Support IP protocol and PING test
19. WAN port supports PPP, HDLC, FRAMERELY and other routing protocols
20. Can establish connection with local or remote router WAN port

21. Automatically obtain the IP address of the peer router WAN port

22. Fast traffic PING test

23. Should be able to provide flexible report generation function, support setting PING test time length, and generate test result file; frame relay test. UNI DTE/DCE frame relay monitoring and simulated customer premises (CPE) testing

24. Compliant with standards: ITU Q.933, ANSI T1.618/T1.617 CISCO LMI, LMI analysis, PVC status, DLCI statistics (providing 32 DLCIs simultaneously), CIR service quality testing.

E1 Interface functions

Specific Indicators



V.35/V.24 interface function requirements

- Interface: V.35&V.24, DCE/DTE, synchronous access mode
- Error code test: code type 2E7, 2E9, 2E11, 2E15, 2E21, all 1, 0/1 alternating
- BERT error code characteristic test complies with G.821 analysis
- Support IP protocol and PING test
- WAN port supports PPP, HDLC, FRAMERELY and other routing protocols
- Can establish connection with local or remote router WAN port
- Automatically obtain the WAN port of the opposite router to establish a connection
- Fast traffic PING test
- In the case of circuit loopback, do loopback fast PING test
- Frame relay test UNI DTE/DCE frame relay monitoring and simulated user end (CPE) test
- Loop detection: Instantly detect whether the remote end of the circuit currently connected to the instrument has looped, and display it intuitively

Optical Power Meter Interface Function

- Calibration wavelength: 850/980/1300/1310/1490/1550/1650
- Probe type: INGAAS
- Power measurement range: -70dBm~+6dBm
- Uncertainty: $\pm 0.25\text{dB}$
- Linearity: 0.03dB
- Display resolution: 0.01dB

OTDR Module Function

- Measurement wavelength: 1550 nm $\pm 10\text{nm}$
- Laser type: pulsed FP laser
- Dynamic: 20dB
- Range: 500M/1KM/2.5KM/5KM/10KM/20KM/40KM
- Pulse width: 10NS/25NS/50NS/100NS/250NS/500NS/1 μS /2.5 μS /5 μS /10 μS
- Blind zone: event blind zone <4M, attenuation blind zone <10M

VFL Interface Function

- Connector type: FC/SC/ST
- Working wavelength: 650NM
- Fiber output power: >10mW
- Frequency flashing: always on/2Hz

Management Function

- Contains Ethernet interface for management, which can be used to export test results
- Display LAN topology diagram; add multiple VLANs
- Support USB interface, USB flash drive, WIFI, and electronic signature
- Built-in 8G TF card

Other General

- Small size, easy to hold with one hand, weighs about 1 kg
- Charger: 5V-20V charging, supports direct charging in the car
- High-resolution 7-inch color LCD display with LED backlight
- Internal battery: polymer lithium battery 12000 mAh, 3.7V
- Battery operation time: 6 hours; charging time: 6 hours
- Instrument operation interface Chinese/English display