



## T200K Handheld Gigabit Ethernet Tester



### Product Overview

The T200K is a compact, handheld, and multifunctional Ethernet test instrument designed for the installation, commissioning, and maintenance of 10M/100M/1000M copper and fiber networks. Integrating capabilities like data capture, performance benchmarking, cable diagnosis, and bit error rate testing, it empowers network technicians and engineers to rapidly troubleshoot issues and validate network performance up to Layers 1-4.

### Key Features & Benefits (Solving Customer Pain Points)

- **AllinOne Portability:** Handheld design with a wrist strap and kickstand allows for easy onehanded operation in the field, increasing maintenance efficiency and reducing tool clutter.
- **Compliance & Automation:** Perform automated RFC 2544 (Throughput, Latency, Frame Loss) and full Y.1564 service configuration tests with ease, ensuring compliance with industry standards quickly.
- **MultiService Testing:** Generate and monitor up to 16 concurrent data flows to accurately assess network performance under complex, realworld conditions.
- **Intuitive Visual Operation:** A 5inch color LCD touchscreen provides clear, graphical and numerical results, simplifying data interpretation for users of all skill levels.
- **Proactive Physical Layer Diagnostics:** Integrated optical power measurement, SFP DDMI monitoring, and Virtual Cable Testing (VCT) help identify potential fiber and copper cable issues before they cause network downtime.
- **Data Management:** Extensive internal memory and USB data export enable detailed postanalysis, reporting, and archiving for audits and performance tracking.

### Core Functions

1. Network Performance Testing: Throughput, Latency, Frame Loss, BacktoBack (RFC2544)
2. Service Quality Validation: Y.1564 Ethernet Service Activation & Performance Test
3. Advanced Troubleshooting: Ping, Trace Route, IP Scan, VLAN (including QinQ) Testing
4. Physical Layer Analysis: Optical Power, SFP Temperature/Voltage/Current, Virtual Cable Test (VCT) for opens/shorts/length

5. Traffic Analysis & Generation: Multistream generation & monitoring, traffic filtering statistics, Jitter measurement
6. Service Disruption Time (SDT) Measurement: Accurately records outage duration and frequency.
7. Additional Tools: Loopback, Packet Capture, and Port Identification.

#### Technical Specifications

| Optical interfaces                    | Two GigE interfaces  |             |             |
|---------------------------------------|--|-------------|-------------|
|                                       | 1000Base-SX  | 1000Base-LX | 1000Base-ZX |
| Wavelength (nm)                       | 850  | 1310        | 1550        |
| Laser type/connector/transceiver type | VCSEL/LC/SFP   | FP/LC/SFP   | DFB/LC/SFP  |
| Electrical interface                  | Two 10/100BaseT half/full-duplex and 1000BaseT full-duplex ports, with straight-through or crossover cable options   |             |             |
|                                       | 10BaseT  | 100BaseT    | 1000BaseT   |
| Connectors                            | RJ-45  | RJ-45       | RJ-45       |
| Test items                            |  |             |             |
| Y.1564                                | Test network configuration and services in accordance with ITU-T Y.1564. Use remote loopback or dual tester mode for bidirectional results.  |             |             |
| RFC2544                               | Measure throughput, back-to-back transmission, frame loss, and latency as specified in RFC 2544. Frame size: RFC-defined, user-configurable from 1 to 7.   |             |             |
| BERT error testing                    | Supports Layer 1 through Layer 4 with or without VLAN Q-in-Q.  |             |             |
| Through mode                          | Segments traffic between the service provider network and customer premises equipment.   |             |             |
| Service disruption time (SDT)         | Includes statistics, including minimum outage time, maximum outage time, last median time, average outage time, total outage time, and pass/fail thresholds.   |             |             |
| Multi-stream generation               | Enables the ability to transmit and monitor up to 16 data streams on Ethernet and IP networks.   |             |             |
| Traffic generation and monitoring     | Capable of generating and monitoring Ethernet and IP traffic flows, and capable of shaping traffic based on the following statistics: throughput, frame loss, frame sequencing, packet jitter, latency, frame size, traffic type, and flow monitoring. |             |             |
| VLAN stacking                         | Capable of generating traffic flows with up to two VLAN layers (including IEEE802.1ad Q-in-Q tagged VLANs) at any stacked VLAN layer, using either VLAN ID or VLAN priority.   |             |             |
| General indicators                    |  |             |             |



|                             |   |
|-----------------------------|---|
| Test interface              | Dual RJ45 ports: 10/100/1000BASE-T<br>Dual SFP ports: 1000BASE-SX/LX/ZX |
| Supported standards         | IEEE 802.3 , RFC3393, RFC2544, Y.1564                                   |
| Data interface              | RJ-45/USB   |
| LED status/alarm indicators | POWER、ALARM   |
| Display                     | 800×480 color LCD touchscreen   |
| Power supply                | Lithium battery/power adapter   |
| Battery life                | Continuous operation for more than 4 hours                              |
| Operating temperature       | 0° C to 50° C   |
| Relative humidity           | 0 to 95% humidity (non-condensing)                                      |
| Weight                      | 800g  |
| Dimensions (L x W x H)      | 190×130×65mm  |

#### **Ideal Applications**

- Enterprise Network Deployment and Acceptance
- Data Center Maintenance and Fault Finding
- Telecom Operator Service Level Agreement (SLA) Verification
- System Integrator Project Commissioning
- Network Maintenance in Education, Healthcare, and Finance Sectors

#### **Why Choose the T200K?**

The T200K is more than just a tester; it's your intelligent partner for network assurance. It combines the precision of benchtop equipment with the convenience of a handheld tool, enabling you to validate network quality, pinpoint faults faster, and significantly reduce operational costs.