

# TC500 Ethernet Cabling Tester



## Overview

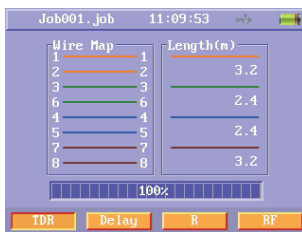
Designed for Ethernet systems, TC500 measures the speed and performance on CAT3, CAT5e and CAT6 cables according to ANSI/TIA/EIA-568-B and ISO/IEC 11801 to ensure the cable qualification.

## Key Features

- Contains a main unit and a remote unit.
- Multi connector: one RJ45 connector for UTP/STP data cable testing, one F connector for coax testing, one RJ11 connector for telephone cable testing and two banana jacks for 2-wires testing
- Support International standard ISO/IEC 11801 and American standard TIA/EIA-568-B
- Tone generator.
- Two additional functions: Ping and BER Test
- Store at least 100 results
- Toolbox software to analyze the results on PC

## Applications

Name	Type	Model	Result
Dcq2	Te1	Channel1	PASS ✓
Dcq3	RG-58	Channel1	PASS ✓
Dcq4	RG-58	Channel1	PASS ✓
Dq1	Te1	Channel1	PASS ✓
Dq2	RG-58	Channel1	PASS ✓
Dq3	CAT6	Channel1	FAIL ✗
Dq4	RG-58	Channel1	PASS ✓
Cable000	ClassD	Perm. Link	



## Auto Test Items

- Wire map
- Length
- Propagation delay
- Delay skew
- D. C. loop resistance
- Insertion loss (attenuation)
- NEXT (near-end crosstalk)
- PS NEXT (power-sum NEXT)
- Return loss
- ACR (attenuation to crosstalk ratio at the near end)
- PS ACR (power-sum ACR-N)
- ELFEXT (equal level far-end crosstalk)
- PS ELFEXT (power-sum ELFEXT)

## Manual Test Items

- Single Auto test item
- BER Test, up to 1000BASE-T
- TONE

## Network Test

- Ping

## Specifications

Items	Range	Resolution	Accuracy
Length	0 m ~ 176 m (UTP) 0 m ~ 200 m (Coax)	0.1 m	±1.5 m
Propagation Delay	0 ns ~ 850 ns	1 ns	±7 ns
Delay Skew	0 ns ~ 100 ns	1 ns	±15 ns
DC Resistance	0 Ω ~ 100 Ω	1 Ω	±2 Ω
RF Frequency	1 MHz ~ 250 MHz	NEXT, Return Loss, ELFEXT: 1 to 31.25 MHz: 150 kHz 31.25 MHz ~ 100 MHz: 250 kHz 100 MHz ~ 250 MHz: 500 kHz Insertion Loss: 1 to 250 MHz: 1 MHz	
RF Items	NEXT: 0 ~ 70 dB Insertion Loss: 0 ~ 40 dB	0.1 dB	±2 dB (Insertion Loss)

Other	
Testing interface	RJ45; RJ11; F; Banana Jacks
Other interface	USB
Power Supply	Main unit: 7.4 V / 2.4 AH Lithium battery Remote unit: 7.4 V / 1.1 AH Lithium battery
Working Time	3.5 hours
Charging Time	5 hours
Dimension	Main unit: 222 mm x 108 mm x 57 mm; Remote unit: 184 mm x 83 mm x 44 mm
Weight	Main unit: 0.8 kg; Remote unit: 0.4 kg