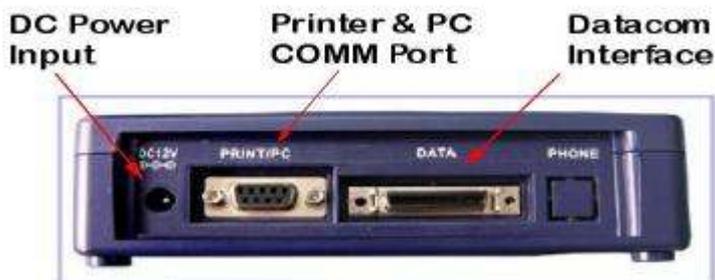
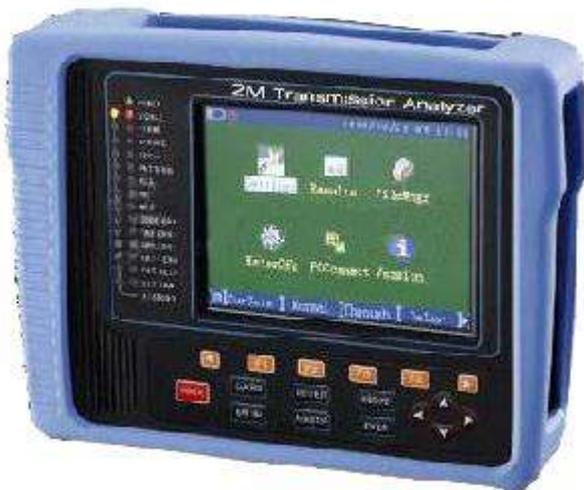


TM101A 2Mbit/s Digital Transmission Analyzer is a complete and compact solution for E1 & Datacom analysis. It is the ultimate field portable analyzer, a multi-functional and full-featured digital transmission system test device, designed for the installation test, engineering check-up, acceptance test, daily maintenance of digital networks, mainly performing channel test, alarm analysis, fault finding and signaling analysis, etc. In addition, TM101A 2Mbit/s Digital Transmission Analyzer also provides various protocols converting with one-way and bidirectional bit error test function

**Description**

**Brief Introduction**





TM101A 2Mbit/s Digital Transmission Analyzer integrates many advantages of several kinds of imported 2M meters. The final design has passed the inspection of communication measurement center, which belongs to information industry.

TM101A meter is PCM2M integrated test handset, mainly used to measure the code error rate of communication line data and analyze the line fault as well as the causes. It can realize the measurement of 2M series N\*64K channel transmission parameters and the daily maintenance test.

Powerful functions are your great assistant. Volume adjustable, loudspeaker can be used. English/Chinese interface makes your work much simpler and easier. Multi-tasks work facilitates your test.

### Key Features

1. The large screen with backlighting is displayed in Chinese/English, and the contrast can be adjusted manually. It can be clearly seen even in the burning sun or in the darkness.
2. The complete LED display makes the working state, signal structure and test results of the instrument much clearer.
3. The shortcut function key can be used to transform any menu interfaces at any moment.
4. Digital volume control can monitor any phone at any moment.
5. Soft switch of power supply can realize the functions of timed start and timed test, etc.
6. Clear historical alarm records at any moment
7. Inject outburst error or rate error at any moment
8. Freely run or stop test
9. The display of test setup and test result can be freely transformed.
10. Intuitionist direction keys make setting simple and effective, and can randomly zoom or move the histogram.
11. The built-in high-performance backup battery can successively work for 5 hours when the power is full.
12. We expediently enter into many additional functions with function keys, and can select the needed functions through the concise menu without complex operations.
13. RS232 printing interface can print any single screen result or the whole results.
14. The data port can be transformed into V series interface of various standards and co-directional 64kbit/s interface through proper-matched cable.
15. The side sketch map: Balance and unbalance interfaces can be well used in all kinds of occasions.
16. One key could transmit the Chinese interface to English interface.

### Main Functions

1. Out-of-Service measurement
2. In-Service measurement
3. Framing and unframed signal transmit and receiving
4. 2Mbit/s unframed measurement
5. 2Mbit/s framing n\*64 Kbit/s measurement
6. Measurement for frame error (FAS ERR), BIT ERR, CRC-4 Error, Code Error (COD ERR), E-bit Error (E-ERR)
7. Clock slip measurement
8. Measurement for signal loss (SIG LOSS), AIS, frames loss (FAS LOSS), pattern loss (PATT LOSS), remote alarm (RA), multi-frame remote alarm (MRA)
9. Line signal frequency measurement
10. Level and frequency measurement of voice channel
11. SMF set and display
12. ABCD set and display
13. Through measurement
14. RT delay measurement
15. Timeslot monitor
16. Three Tx Clock Options (Internal, external, and recover from the received signal)
17. Three Inputs Mode: Terminal, Bridge, Monitor
18. G. 821, G. 826, M. 2100 performance
19. Graphs results of alarm and error
20. RS232 printing
21. Built-in memory prevents data loss when power off
22. Connect to PC
23. 7 setup storages and 436 results storages
24. Bi-directional Listen, dual E1 Measurement
25. Tx Clock offset function
26. Online software update
28. Measurement for co-directional 64k, V. 35 Synchronization
29. Pattern Slip (PAT SLIP) measurement
30. APS (Auto Protect System) Time Measurement
31. Dual-frequency departure measurement

## Technical Specifications

<b><i>TX</i></b>	TM101C E1 Tester
Output interface	75 Ohm balanced, 120 Ohm balanced, conforming to G.703 requirements
Signal structure	Unframed Frame (PCM30, PCM31, PCM30CRC, PCM31CRC), conforming to G.704 n×64 Kbit/s structure
Line code	HDB3 or AMI
Signal rate	2048 kbit/s
Internal clock accuracy	≤ ±10ppm
Clocking	Internal, external and distill

Output intrinsic twittering	<0.05UI(20Hz-100kHz)
Test pattern	False random sequence 2E6-1,2E9-1,2E11-1,2E15-1, 2E20-1, 2E23-1, conforming
Free TS pattern:	8bit man mode
Code error insertion	FAS ERR: once, continuous twice, continuous 3 times, continuous 4 Times BIT ERR: single 1E-2~1E-7
Pattern slip	PAT slip
<b>RX</b>	
Signal input impedance	terminal: 75 Ohm unbalanced, 120 Ohm balanced, Tx loss conforms to G.703 bridge: >750 Ohm unbalanced, >1200 Ohm balanced monitor: 20 dB for input sensibility
Signal input equalizing feature	0—9 dB
Signal input twittering capacity	conforms to G.823
Input anti-interference	conforms to G.703
Signal structure	Unframed Frame (PCM30, PCM31, PCM30CRC, PCM31CRC), frame signal conforms to G.704 n×64 kbit/s structure
Line code	HDB, or AMI
Signal rate	2048 kbit ±50ppm
Test pattern	False random sequence 2E6-1,2E9-1,2E11-1,2E15-1, 2E20-1, 2E23-1 conforming to ITU-T0.151, man code 8 bit
Frequency test	For line signal and voice channel signal
Level test	For line signal and voice channel signal
Bit error monitoring	FAS ERR, BIT ERR, CRC-4 code error performance test, CODE ERR
Alarm monitoring	AIS, SIG LOSS, RA, MAR, FAS LOSS, CRC LOSS, PAT LOSS, PAT SLIP
Slip monitoring	PAT SLIP, CLK SLIP
Time delay test	Test time delay performance
Bit error analysis	G.821, G.826, M2100
External clock input impedance	Terminal: 75 Ohm unbalanced, 120 Ohm balanced, Tx loss conforming to G.703 Bridge: >750 Ohm unbalanced, >1200 Ohm balanced
External clock input signal	HDB3/AMI conforming to G.703, pulse signal, >2.5V <sub>p-p</sub>
<b>Other Specifications</b>	
Battery Duration:	5hs (except Modem status)
Dimensions/Weight:	200mm*160mm*42mm/0.95kg(With battery)

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**Haberleşme sistemlerinde **yüksek performansı** yakalayın**

