

MT300

MOTECH

Aeasy ADSL Tester



- ❖ **Small Size**
- ❖ **Compact**
- ❖ **User Friendly**

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MT300 Aeasy is a handheld tester for POTS and ADSL lines. It is a fully integrated ATU-R modem emulator for ADSL line installation, qualification and maintenance. MT300 also represents a digital multimeter for troubleshooting the basic cooper loop. Apparently, daily based telecommunication technicians focus on these two test functions as the major purpose of troubleshooting the ADSL line. It is an easy operation tester with only one button press to provide the desired result instantly. In addition, it's compact design & dimension of 180 x100 x 45mm approx. makes holding and operation extremely easy,simple and comfortable .Thus, depicts MT300 as a great modern tester

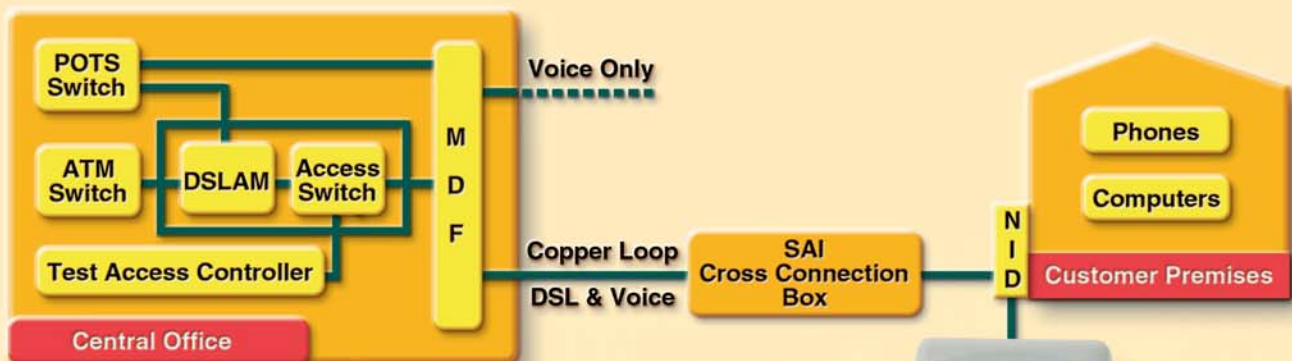


Features

- ◆ Small size, compact and easy operation
- ◆ Fully modem emulation for ADSL application
- ◆ Indicates upstream/downstream rate, noise margin, SNR, attenuation and output power
- ◆ LED indicator for modem connection status
- ◆ Bits per tone in graph via printer or PC
- ◆ IP ping test with PPPoE and PPPoA protocols
- ◆ Digital multimeter for basic line troubleshooting
- ◆ Insulation resistance measurement
- ◆ Load coil counter detection
- ◆ Store up to 50 test results
- ◆ Build-in Ethernet port for through mode operation

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Test Configuration



The MT300 Aeasy is the ultimate solution for prequalification of the ADSL circuits. The connection of MT300 at the end of the line, makes the modem to connect with the DSLAM and to measure the bit-rate, noise margin, SNR, attenuation and output power. MT300 is easy to operate by multi-functional key pads and backlit LCD. A glance at the quick response of bi-color LED, the technician can easily find out the line condition as well as the error or alarm status.



Bits per Tone in Graph

The MT300 is able to display DMT carriers in bits per tone graph through a printer or PC directly. Thus, you can easily identify transmission influence such as ISDN, AM radio, or other DSL accordingly. The MT300 also can measure DMT carriers in bits per tone table on 16x4 characters dot matrix LCD.



Software Upgradeable

The MT300 is upgradeable via serial port. Simply download the software from PC files.

Specifications:

A. Line Measurement

1. Loop DCV Measurement

Range	: 0 to 300V
Resolution	: 1V
Accuracy	: $\pm 1\%$ of reading $\pm 2V$
Connection	: T-R, T-S, R-S

2. Loop ACV Measurement

Range	: 0 to 250Vrms
Resolution	: 1V
Accuracy	: $\pm 3\%$ of reading $\pm 3V$
Connection	: T-R, T-S, R-S

3. Loop DCA Measurement

Range	: 0 to 200mA
Resolution	: 1mA
Accuracy	: $\pm 2\%$ of reading $\pm 1mA$
Connection	: T-R, T-S, R-S

4. Loop Resistance Measurement

Range	Resolution	Accuracy
0 to 2000 Ω	1 Ω	$\pm 2\%$ of reading $\pm 3\Omega$
2000 to 20K Ω	10 Ω	$\pm 2\%$ of reading $\pm 20\Omega$
20K to 200K Ω	100 Ω	$\pm 2\%$ of reading $\pm 100\Omega$
200K to 2M Ω	1K Ω	$\pm 2\%$ of reading $\pm 1K\Omega$
2M to 20M Ω	10K Ω	$\pm 5\%$ of reading $\pm 10K\Omega$

Connection	: T-R, T-S, R-S
Display	: Distance in meter/feet, Resistance

5. Insulation Resistance Measurement

Range	: 100M Ω
Resolution	: 0.1M Ω
Accuracy	: $\pm 10\%$ of reading $\pm 0.2M\Omega$
Testing Voltage	: 100V
Connection	: T-R, T-S, R-S

6. Loop Capacitance Measurement

Range	Resolution	Accuracy
4nF to 40nF	10pF	$\pm 2\%$ of reading $\pm 20pF$
40nF to 400nF	100pF	$\pm 2\%$ of reading $\pm 200pF$
400nF to 4 μ F	1nF	$\pm 2\%$ of reading $\pm 2nF$

Connection	: T-R, T-S, R-S
Display	: Distance in meter/feet, Capacitance

7. Load Coil Detection

Load Coil Count	: 5 Max.
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B. ADSL Modem Emulator

1. Chipset : ADI
2. Emulation : ATU-R modem, ATU-R modem through mode
3. Line Coding : Discrete Multi-Tone
4. Standard Compliant : ANSI T1.413 issue 2, ITU-T G.992.1 (G.DMT), G.992.2 (G.Lite)
5. Up/Down Stream Measurement (Interleave/Fast)
Connection Bit Rates : Upstream 960Kbps, Downstream 10Mbps
Max Bit Rates : Upstream 960Kbps, Downstream 10Mbps
Noise Margin : 0 to 32 dB
Attenuation : 0 to 64 dB
Output Power : 0 to 21 dBm
6. Link Measurement : FEC, CRC, HEC (error), LOS, LOC, LOF, LOP, LCD

7. Bit Per tone in Tabular display & may transfer to printer or PC for graphic display (option)

8. IP measurement

8.1 Protocol Supported

- IP over Ethernet : RFC 1483/2684 LLC bridging/ routing mode with static & DHCP IP assigned
- IP over PPPoE : RFC 2516 PPPoE (Static&Dynamic) with PAP/CHAP PPP session authentication supported
- IP over PPPoA : RFC 2364 PPPoA

8.2 Test Results

- Statistics on Ping Message: No. of sent / received / missing or unreachable messages and round trip delay for current / average / Max/Min

8.3 Setup parameter

- Local/Destination/Gateway IP address
- Encapsulation/User name & password for PPP session authentication

9. ATM Layer measurement

9.1 OAM loopback test

- Segment or end-to-end loopback test
- Returns round trip delay time

10. LAN Port : 10/100M Auto Detection for Through Mode

C. General

1. Display : 16 x 4 characters dot matrix LCD with EL backlit and LED indication of modem sync, link measurement, LAN connection status and test status
2. Connector : RJ11 --- Test port
RJ45 --- LAN port
RJ11 --- RS-232C port
3. Battery : AA-size Ni-Mh rechargeable battery
4. Battery Life : 3 hours typical
5. AC Operation : 115/230V 50/60Hz (via external adapter)
6. Temperature : 0° to 40° C (Operating)
-20° to 70° C (Storage)
7. Relative Humidity : Up to 85%
8. Dimension : 180 x 100 x 45 mm approx
9. Weight : 650g approx.

Standard Accessories

- | | |
|------------------------|------|
| ① RJ 11 test lead | 1PC |
| ② RS232C cable | 1PC |
| ③ Power adapter | 1PC |
| ④ Rechargeable battery | 4PCS |
| ⑤ Soft carry case | 1PC |

Optional Accessories

- | | |
|---------------------------|-----|
| RS232C serial printer | 1PC |
| (320 dots/line, graphics) | |



MOTEC

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Specifications subject to change without notice.