

MC2+

*The Most Cost-Effective Solution
for Broadband Access Roll-Out*

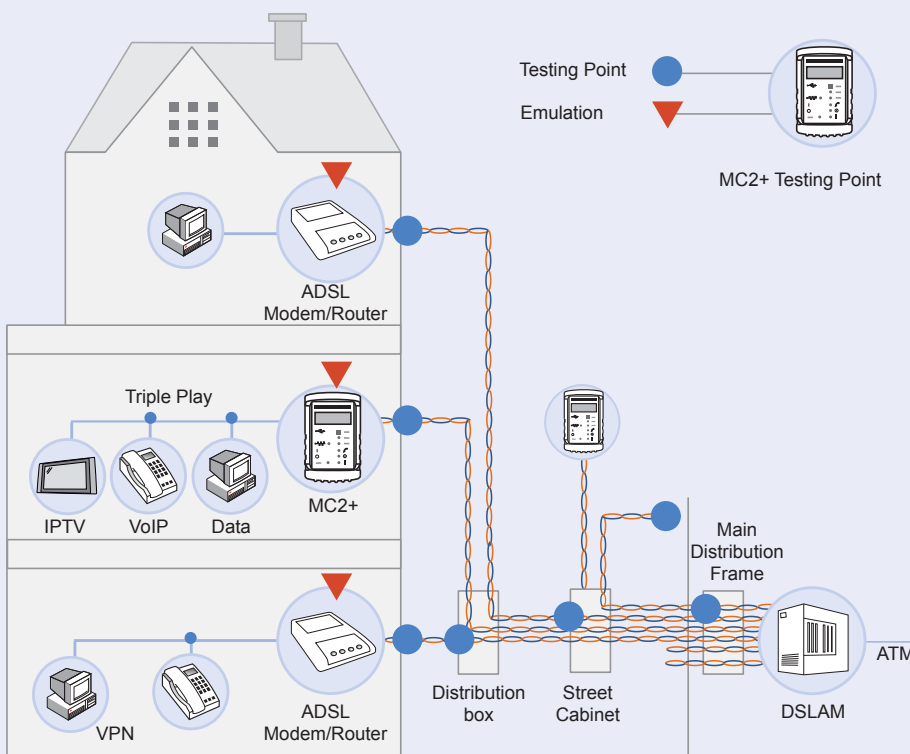


ADSL is by far the most popular broadband access technology, accounting for more than 70% of the global market.

The market demand for high-speed access is growing continuously, especially with the appearance of new multimedia applications that require more and more bandwidth and better coverage. The new ADSL2 and ADSL2+ standards enable service providers to fulfil all the technical requirements and continuously improve performance, so they can now offer new voice, video and data services such as IPTV, VoD, PVR or VoIP.

Trend MC2+ is a new low-cost test solution that meets all the challenges of modern broadband access technologies. With this tester, the mass deployment of ADSL, ADSL2 and ADSL2+ is really cost-effective and easy.

Trend MC2+ is the ideal solution for effortless, yet productive service deployment over the local loop.



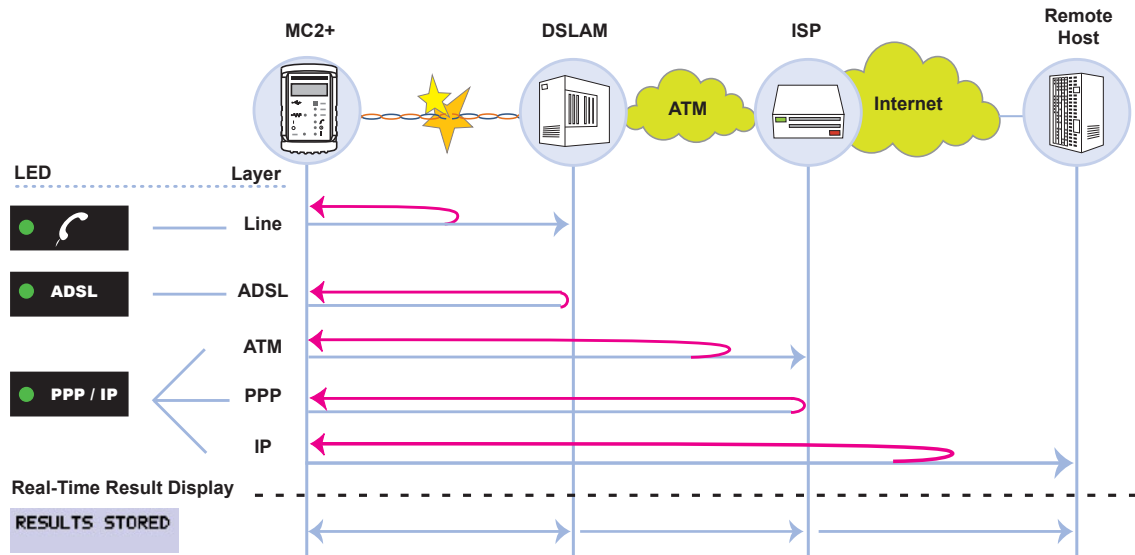
- Small, robust and cost-effective
- Quick and easy automatic testing
- Endpoint and Through modes
- Full ADSL, ADSL2, ADSL2+ and RE-ADSL2 support
- IP ping test
- Supports ITU-T G.dmt, G.lite and ANSI T1.413
- One-button result display
- Connection rate, line attenuation and noise margin
- Remote control
- Two models: Basic MC2+ and MC2+ Display

Cost-Effective Tool

for instant network troubleshooting

Multilayer Testing

Trend MC2+ tests all the layers of your network to ensure end-to-end connectivity. The tester first looks for DC power on the ISDN/POTS line to confirm connection with the central office. It then initiates 'training' with the DSLAM and authenticates the connection with the PPP peer. The IP layer is checked by sending a ping to the remote address. All this is fully automatic, done in one single test.



Efficient ADSL Testing

The personnel responsible for ADSL service provision in large MDFs needs to make dozens of new connections every day. In these circumstances, it is quite easy to make mistakes, especially under heavy workload.

Trend MC2+ has been designed for use in the MDF, and it can detect most MDF-based faults, such as broken tie cables, short circuits, bad joints, as well as any operational problems or configuration issues affecting the DSLAM.

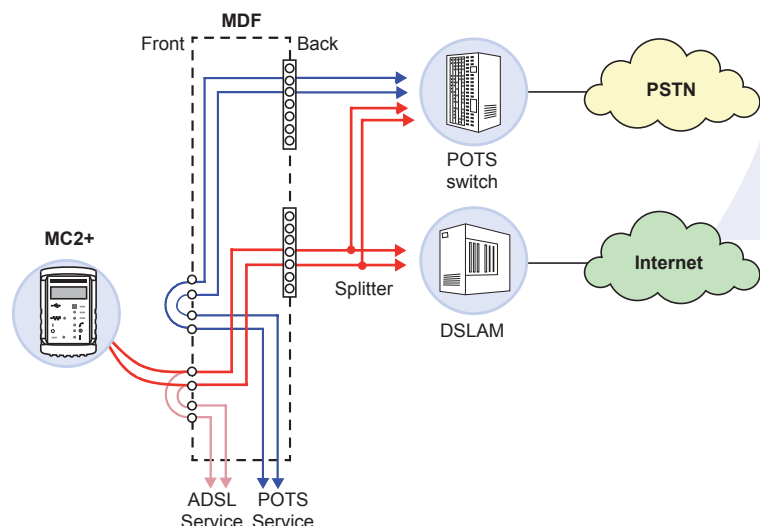
Line identification and telephone service verification can be done just by making a phone call by using the on-board identification ringer.

Use Trend MC2+ to check your ADSL, ADSL2 or ADSL2+ service in the central office, and you can dramatically reduce the need to send technicians to remote sites.

Remote operation

Trend MC2+ can be controlled remotely via the Internet. Thanks to this feature, even very complex measurements can be performed directly from a central location.

Easy access to the Internet directly from the tester comes in handy when you wish to download configuration parameters for specific tests or upload test results to a server-based database.



MC2+

Models	Basic MC2+ MC2+ Display
Connection Modes	Endpoint and Through mode
Operation Modes	Stand-alone mode Hosted mode (PC connection)
Settings	Connection type: PPPoA, PPPoE, Bridge, Static, DHCP and CLIP PPP authentication type: Auto, CHAP and PAP PPP timers: Idle timeout and Keep alive VC settings: VPI and VCI ATM traffic profile (UBR, CBR and VBR) Modulation: MMODE, T1413, G.dmt, G.lite, G.dmt.bis (ADSL2) and ADSL2+ Encapsulation: LLC/SNAP or VC mux IP ping settings (remote address, ping size, number of pings)
Results¹	Upstream and downstream noise margin, line attenuation and transmit power Upstream and downstream connection speed (current and attainable) Downstream noise margin history (stand-alone mode only) Channel utilization Peak cell rate (hosted mode only) F4 and F5 near-end loop-back count (hosted mode only) Transmitted and received bytes and frames Error counts (hosted mode only) IP address assignment IP ping test result Line identification ringer System log (hosted mode only) Storage of up to 16 results with editable names ²
LED Indicators	Power: On/Off status Battery Low: Warning for low battery Line: Connection with the central office (Green for POTS, Blue for ISDN) ADSL: DSLAM synchronisation status PPP/IP: ATM, PPP and IP connectivity status
Connectors	RJ-11 line connection USB and RJ-45 for hosted mode DC jack for external power
Relevant Standards	ANSI T1.413 Issue 2 ITU-T G.992.1 (ADSL, G.dmt) ITU-T G.992.2 (ADSL, G.lite) ITU-T G.992.3 (ADSL2, G.dmt.bis) ITU-T G.992.4 (ADSL2, G.lite.bis) ITU-T G.992.5 (ADSL2+) ITU-T G.992.3 Annex L (RE-ADSL2) ITU-T G.992.x Annex A (ADSL over POTS), Annex B and Annex B/U-R2 (ADSL over ISDN) RFC 1483 (bridged/routed protocol encapsulation over ATM) RFC 2368 (PPPoA) RFC 2516 (PPPoE)
CE Marking	EMC - EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3 Safety - EN 60950 WEEE Directive
Environmental	EN 60529 Class 20 ETS EN 300 019-2-7 Class 7.2
General	Dimensions: 90 mm x 140 mm x 45 mm Weight: 400 g (battery included) Operating temperature: from 0 °C to + 40 °C Storage temperature: from -10 °C to + 50 °C

¹ Basic MC2+: results only available in hosted mode

² Only available for MC2+ Display

