

المواصفات الفنية الخاصة بالمناقصة العامة

رقم المناقصة : (2011/28)

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General Specifications of subscriber Loop Analyzer

General

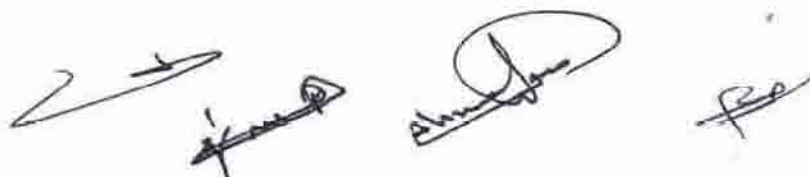
Complete testing of POTS and ISDN subscriber loops

The subscriber Loop Analyzer must be a microprocessor-controlled integrated test set that provides full-featured POTS and fundamental ISDN testing. The functions include fault location and repair verification on twisted-pair, quad and coaxial cable (utilizing capacitance bridge, resistance bridge and Time Domain Reflect meter (TDR) functions).

The subscriber loop analyzer executes a wide range of individual tests, or performs automatic test routines as specified by the user to categorize and sectionalize problems.

Specific tests and measurements performed by the unit include:

- Voltage – detects and measures the presence of exchange or foreign DC or AC voltages.
- Tone – provides a test tone for conductor identification; user-selected tones from 1 to 40 kHz for transmission measurements.
- Current – measures DC loop current.
- Ohms – measures conductor and insulation resistance up to 1000 megohms.
- TDR – full-featured TDR with user-selectable pulse widths, length, gain zoom, filter and Vp. Four modes of operation:
 - Single trace** – provides graphical representation of events on a pair.
 - Dual trace** – allows active comparison of two traces.
 - Differential** – displays difference between two circuits.
 - Crosstalk** – displays the crosstalk from one pair to the other.
- Resistance fault location – displays distance to fault.
- Opens – locates opens at distances up to 100,000 ft. (30 km).
- Splits – locates splits on paired cable.
- Ringer count – counts the number of ringers on a particular loop.
- Load coil count – indicates the presence of load coils in a loop circuit.



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with CO voltage 0 to 9999 Ω 1 Ω 1% \pm 50 Ω

10 k to 99.9 k Ω 0.1 k Ω 1%

100 k to 999 k Ω 1 k Ω 3%

1 M to 9.9 M Ω 0.1 M Ω 3%

10 M to 99 M Ω 1 M Ω 5%

100 M to 990 M Ω 10 M Ω 10%

Opens (no noise) 0 to 3,000 ft (0 to 1000 m) 1 ft (1 m) 1% \pm 3 ft

3,000 to 10,000 ft (1 km to 3 km) 1 ft (1 m) 3%

10,000 to 50,000 ft (3 km to 15 km) 10 ft (10 m) 5%

50,000 to 100,000 ft (15 km to 30 km) 100 ft (100 m) 10%

RFL

Fault range 0 to 20 M Ω — —

Resistance to 0 to 99.99 Ω 0.01 Ω 0.1% of RTS \pm 0.01 Ω

fault (no noise) 100 to 999.9 Ω 0.1 Ω 0.2% of RTS \pm 0.01 Ω

1 k Ω to 7 k Ω 1.0 Ω 1.0% of RTS \pm 0.01 Ω

Loss (& frequency) -40 to +10 dBm, 200 to 3000 Hz 0.1 dB, 1 Hz

0.5 dB, 2 Hz

-40 to +10 dBm, 3000 to 9995 Hz 0.1 dB, 5 Hz 0.5 dB, 10 Hz

-40 to +10 dBm, 10 k to 19.9 kHz 1 dB, 10 Hz 1 dB, 20 Hz

Wideband loss -40 to +10 dBm, 20 k to 200 kHz 1 dB, 100 Hz 2

dB, 0.1 kHz

Noise metallic 0 to 50 dBrc (-90 to -40 dBm0p) 1 dB 2 dB

Noise to ground 40 to 100 dBrc (-50 to 10 dBm0p) 1 dB 2 dB

Longitudinal balance 62 to 40 dB 1 dB 2 dB

Tone output

ID 200 to 1000 Hz, fixed level 1 Hz 1%

User defined 200 to 9995 Hz, -20 to +1 dBm 1 Hz, 0.1 dB 1% Hz,

0.2 dB

User defined 10 k to 19.99 kHz, -20 to +1 dBm 10 Hz, 1 dB 2% Hz,

1 dB

ISDN 40 kHz, +6 dBm fixed level — 2%, 2 dB

Dial mode DTMF, Pulse Standard Standard

TDR

Ranges 3 ft–300 ft, 20 ft–1,000 ft, 1 ft (1 m) 0.6% range

50 ft–3,000 ft, 150 ft. 10,000 ft,

450 ft–30,000 ft

(0–100 m, 5–300 m, 15–1,000m,

45–3,000 m, 140–10,000 m)

Pulse width 5 nS, 34 nS, 235 nS, 1600 nS Fixed values —

Velocity input 0.50 to 0.99 (150 to 299 μ S/m) 0.01 (1 μ S/m) —

Modes Single trace, dual trace, — —

differential, memory, crosstalk



ISDN

Link test Active/inactive — —

Error test Near-end & far-end block errors 1 error 1 error

Auto Same specifications as full tests See above See above

Accessories

Test leads Five 5 ft (1.5 m) test leads with 2 mm gold-plated banana plugs one end and chrome-plated alligator clips on other end (black/red, blue/yellow, green)

RFLstrap 1.5 ft (0.5 m) with alligator clips on three ends

AC/DC adaptor 100-250 Vac (50/60 Hz) input; 12 Vdc (1 A) output

Soft case Heavy-duty fabric case for unit and test leads

Battery holder Plastic holder for 6 AA(LR6) batteries

Battery pack Custom 1.2 amp-hour Nickel metal hydride

Toolbox Functions

Resolution Accuracy

Load coil count 0 to 4 1 1

Ringer count 0 to 5 1 1

Ohms/distance 0-9999 Ohms 0.1 Ω —

calculator 0-165000 ft (0-50 km) 1 ft (0.1 m) —

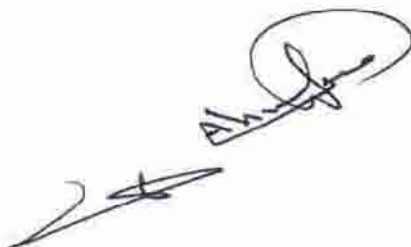
Caller ID Number, name, date, time — —

Carrier level -4 to -32 dBm 1 dBm 2 dBm

Self-calibrate Yes or no

Tenderer must

- ❖ Support the Instrument maintenance
- ❖ Support the training in local area
- ❖ Offering sample to test it (if possible)



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