

DCM ES-2G

Structured Cabling Test System for Category LAN Cables



Features and Benefits

- Test Cat 7/7A cables with option for Unshielded (U/UTP) and Shielded (U/STP, S/STP, F/UTP) Twisted-Pair cable testing
- Automatic 4-pair switching system
- Innovative technology eliminates the effect of jacket removal on reflection measurements, such as input impedance and return loss
- Simple, easy-to-use software for automated testing

Test 4-Pair Cables up to 2.2 GHz

The DCM Model ES-2G provides an ideal test solution for compliance testing of high-performance, individually shielded, twisted-pair (ISTP) cables up to 2.2 GHz. A U/UTP cable fixture is also available for testing non-individually shielded, twisted-pair cables. The ES-2G base unit includes the automatic switching and baluns needed to interface the cable under test to an external vector network analyzer. The ES-2G



Windows-based software solution includes a simple, easy-to-use test program with automatic comparison to the test specification, full test reporting, and data management.





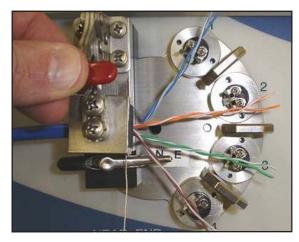
Fast, Easy and Accurate

The ES-2G is configured with specialized ISTP test heads providing an easy means for connecting the CAT 7A cable under test to the test system, minimizing external influences and providing the isolation needed for accurate test results.

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ISTP test heads come standard

Additionally, the ES-2G is available with interchangeable UTP test heads for testing U/UTP, U/STP, S/STP, and F/UTP CAT 5E, CAT 6, CAT 6A cables.



Optional U/UTP test heads

Comprehensive Testing Capabilities

ES-2G Measurement Parameters (full range up to 2.2 GHz)

Compliant with key industry cable testing standards, the DCM ES-2G measurement parameters include:

- ► Insertion Loss (Attenuation)
- ► Input Impedance
- ► Characteristic Impedance
- ► Near End Crosstalk Loss (NEXT)
- ► Far End Crosstalk Loss (FEXT)
- Velocity of Propagation
- Structural Return Loss

- ► Equal Level Far End Crosstalk (ELFEXT)
- Return Loss
- ► Attenuation to Crosstalk Ratio (ACR)
- ▶ Propagation Delay
- ► Propagation Delay Skew
- ► Crosstalk Loss Power Sums

Ask us about next-generation CAT8 cable testing.

System Details and Options

System Configuration

Each ES-2G unit includes:

- Two (2) ISTP test heads
- One (1) ES-2G Cal Kit including open/short/load and through standards
- One (1) External power supply with power cable
- Two (2) SMA-SMA cables for connecting the base unit to the VNA
- One (1) RS-232 serial communications cable for connection to the computer
- One (1) ES-2G test automation software package

ES-2G Windows®-based Software includes:

- ▶ Test Entry Screen
- Specification Editor
- Formula Wizard
- Data File Manager

Optional items:

- UTP Test Option, includes two (2) U/UTP interchangeable test heads
- ➤ 3S-LF2000 4-pair test set for Capacitance, Resistance, Conductance, Inductance, and Unbalance measurements

Additional system requirements:

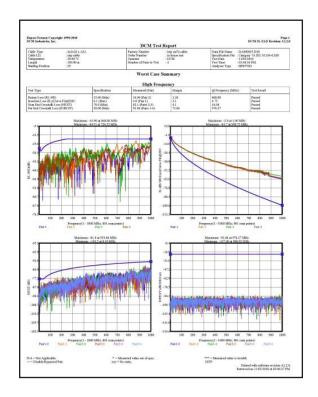
Vector Network Analyzer (VNA) – Keysight Technologies Model E5061B-235 recommended. Other VNA may be acceptable. Please verify with NDC.



Windows® XP/Windows® 7 OS Computer, Printer and Monitor - Customer must verify current minimum computer specifications or NDC can offer a suitable computer option. National Instruments suitable USB-GPIB or GPIB card and cable required.

Test Reporting

The system includes a variety of test report options which are easily selected by the operator or automatically by the test specification. Test reports include simple pass/fail summaries, extensive graphic analysis, and detailed discrete value reports.



Installation, Training and Technical Support

NDC offers on-site installation, training, and commissioning of all DCM automatic test systems. The NDC team provides worldwide support to answer all technical needs and to ensure that maximum test system efficiency is achieved.

Specifications and configurations are subject to change without notice.





Precision Measurement & Control Solutions

The Beta LaserMike line of measurement and control solutions from NDC Technologies is designed to increase productivity, improve product quality, and reduce manufacturing costs. These solutions provide in-process dimensional monitoring, control, and sample/part inspection of products such as wire and cable, fiber optics, metals, rubber and plastic, flat rolled goods, tube and pipe, and other manufactured goods. Every system is backed by NDC's world-class service and support organization. With offices around the globe, we're committed to serving your unique measurement application needs.

NDC Technologies is represented in over 60 countries worldwide. www.ndc.com/betalasermike

a Spectris company

NDC Americas

Tel: +1 937 233 9935 Email: sales@betalasermike.com

NDC United Kingdom Tel: +44 1621 852244 Email: sales@betalasermike.com NDC China

Tel: +86 21 6113 3617 Email: sales@betalasermike.com

NDC Germany
Tel: +49 (0) 231 75893 0
Email: sales@betalasermike.com

NDC Italy

Tel: +39 0331 454207 Email: sales@betalasermike.com

NDC SE Asia Tel: +65 91994120

Email: sales@betalasermike.com

NDC India

Tel: +91 124 2789507 Email: sales@betalasermike.com



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