

Image: NT 600 with options

NT 600

Modular Wiring Tester

- Easy operation via PC with control software NT Control
- Comfortable test program editors
- Extensive display possibilities and tools for fault location in the unit under test
- Extensive result reporting to file, to printer or via database connection*
- Up to 1024 test points in the base unit, expandable via additional units up to **max. 5120 test points**
- Continuity test, short circuit test and component test
- High current test up to **2 ADC***
- High voltage test up to **1500 VDC***
- Dielectric strength test up to **1060 VAC** / **1500 VDC***
- Remote maintenance
- The NT 600 is the ideal entry-level tester – easy expandable for future test requirements
- Low start-up costs
- Easy expandable*:
  - Additional measurement electronics
  - LCR measurement bridge
  - Test point expansion via test point units
  - Four-wire measurement from 1 mOhm
  - Insulation tests up to 10 GOhm
- Test table support
- The demands of the following test standards are complied with: IPC/WHMA-A-620, MIL-STD-202G, NASA-STD 8739.4A, MIL-HDBK-83575, MIL-STD-1344A, MIL-C-45224D

* optional

TESTING



Options

Measurement electronics expansion

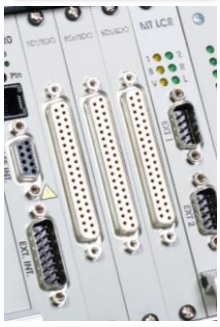
to the base equipment MT20 up to 25 VDC / max. 25 mA

- Measurement electronics:
  - MT40-40 up to 40 VDC / max. 100 mA
  - MT40-250 up to 250 VDC / max. 10 mA
  - MT1500DC up to 1500 VDC / max. 2 A
    High voltage insulation test / high current continuity test
    (optional up to 40 VDC / 10 A pulsed)
  - MT2000 up to 1060 VAC / 1500 VDC
    Dielectric strength test, max 3 mA or 6 mA
- Internal AC measurement bridge MT_LCR for the test of inductances, capacitances and resistances
- Voltage measurement device MT_EXT for the voltage measurement up to 700 VDC and 500 VAC (max. 400 Hz)
- Four-wire (Kelvin) measurement for measuring low resistances from 1 mOhm



Function test

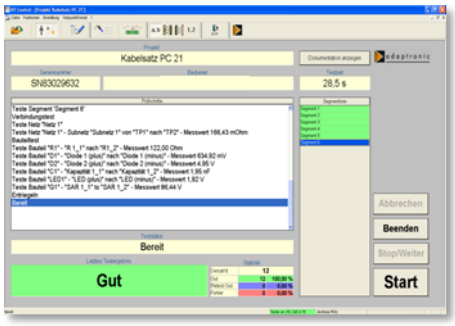
- Stimulus cards
- Stimulus sources
- Test and programming of one-wire devices
- Total integration of camera systems for visual tests
- ProfiNet, LIN-, CAN-, Mod-Bus TCP, other bus systems on request



Elaborate number of interfaces

- Digital inputs and outputs 24 V
- Interface for test point units (standard)
- Extern Interface (standard)
- Safety loop (standard)

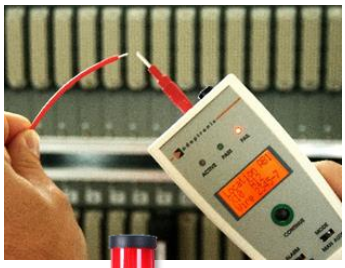
etc.



NT Control test and programming software

- Graphic user interface with clear test display
  - Operating buttons, test status, statistics
  - In the error case display as error list or single error
- Editors for net lists, link lists, insulation point lists (prim lists) and component lists, function test editor
- Easy realization of special test procedures
- Comfortable multimeter function
- NT Control is part of the delivery!

For further information about the wide-range of features please note the NT Control product information.





Options

Open Wire Probe

- Intelligent pin number probe
- Test point display
- Status display
- Operation modes automatic and manual

Operating and display options

- Foot switch for test start
- Warning lamp for high voltage tests
- Test result lamp



Temperature and humidity logging

- Combined temperature and humidity sensor
- Interface at the NT 600
- Temperature and humidity available in NT Control



Comprehensive possibilities of interface boards and adapter cables

- Interface boards for the adaption of the adaptronic interface to existing adapter cable connector systems
- Adapter cables with adaptronic standard interfaces, open cable ends for the adaption by the client or application specific special adapter cables



Test point units

- Up to 1024 test points each unit
- Max. 4 test point units with max. 4096 test points can be operated from a NT 600 (with max. 1024 test points)
- Positioning of the base unit and the test point units directly side by side or one upon the other

Additional services

- Training for programming and testing with NT Control and NT 600
- Calibration service
- Application specific assistance

Test program generation and testing with NT Control

With the user friendly software NT Control it is comfortable to generate, edit and to manage test programs as well, as to carry out tests. The data transfer between a PC with NT Control and a NT 600 takes place via network. NT Control is necessary for the operation of the NT 600 and part of the delivery. NT Control can be run on a PC* with the operating system Microsoft Windows® 7 Pro up to Windows® 10 Pro (country variants German or English).

Technical features NT 600	
Test points	max. 1024 in the base unit (expandable with test point units up to 5120 test points)
Low voltage test DC	
Test voltage	max. 25 V (optional up to 250 V)
Test current	max. 25 mA (optional up to 100 mA)
Threshold continuity test	1 Ohm – 1 kOhm
Threshold short-circuit test	20 kOhm – 1 MOhm (optional up to 100 MOhm)
Component test	Resistors: 1 Ohm – 1 MOhm (optional up to 100 MOhm) Capacitors: 10 nF – 20 mF (optional from 10 pF) Diodes, Zener diodes, LEDs, optional: inductances, impedances, varistors (max. 1300 VDC)
High current test DC (optional)	
Test voltage	max. 22 V
Test current	max. 2 A (optional 10 A pulsed)
Threshold continuity test	0,5 Ohm – 1 kOhm
Options	Four-wire measurement from 1 mOhm / Recognition of short time interruptions ≥ 1 µs
High voltage test DC (optional)	
Test voltage	40 – 1500 V
Insulation test	500 kOhm – 2 GOhm (optional up to 10 GOhm)
Breakdown test	Fast recognition of voltage breakdowns (arc detection)
Dielectric strength test AC/DC (optional)	
Test voltage / test current AC	100 – 1060 V / max. 3 mA, safety current limited according to EN 50191 (optional max. 6 mA)
Test voltage / test current DC	40 – 1500 V / max. 3 mA, safety current limited according to EN 50191 (optional max. 6 mA)
Function test (optional)	
	The NT 600 can be expanded, so that the test of relays, time relays, contactors, indication lamps, function procedures etc. can be carried out automatically. Therefore stimulus cards and stimulus sources are available beside powerful software tools and editors in NT Control.
General	
Interfaces	Interface for expansion units Extern interface with 3 opto-coupled inputs and 3 potential free outputs (expandable) Serial interfaces RS232 / USB 2.0 Network Pin number probe
Dimensions (W x H x D, approx.)	Base unit: 450 mm x 275 mm x 395 mm Test point unit 0ZE31: 450 mm x 150 mm x 395 mm
Scope of delivery base unit	NT 600, main cable, pin number probe, USB flash drive with NT Control and documentation in PDF format, mating connector and service connector for safety loop

* PC not in the scope of delivery

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