

Technical Data NT 700-1

Notes:

NT 700 test systems are designed individually. This datasheet includes the basic equipment of a NT 700-1. Optional measurement electronics and generators are described in separate datasheets. Some stated maximal parameters cannot be reached with the concrete test system depending on the application.

- The maximum currents and voltages depend on the used test point cards and will be limited by them accordingly.
- The maximum possible number of test points depends on the used cabinet size.
- Test point cards with different mechanical and electrical features can be used. Which test point cards are installed in the system depends on the requirements on the test system.

Test points	
Max. number of test points	32768
Other	
Power supply	100 – 240 VAC (50 - 60 Hz)
Dimensions	cabinets for 19" racks, heights: 9 RU – 43 RU
Environmental conditions	Temperature range: operation: +10 °C – +40 °C storage: +10 °C – +60 °C
	Relative humidity: 30 % – 70 %, non-condensing
Operating	Control software NT Control, executable on a PC with Microsoft Windows® 7 Pro up to Windows® 10 Pro (country variant German or English)
	Clearly designed operator interface, customizable
	Transparent test procedures, extensive graphical fault description
	Detailed printouts of the test results on all printers supported by Windows®
	Report, label and lot printing
	Remote maintenance
Programming	Autoprogramming of golden patterns
	Test program editors
	Test point naming in several formats, output format selectable
	Individual test procedure programming with Sax Basic Engine
	Correction value determination for R, C, L and Z (option)
	Function test (option)
	AC/DC stimulus sources (option)
	Voltage measurement / external voltage detection (option)
	Test program selection via I/O card (option)
	UNICAD-converter for CAD- and Excel link-data (option)
	Downward compatible to existing test programs in the ATX-format
	Temperature and humidity logging, 0 - 100 % rel. humidity ±2 %, -40 – 80°C ±0.3 K (option)
Diagnosis	Self-diagnosis for the measurement electronics and the test point cards
Interfaces	Network
	Serial interfaces RS232 / USB 2.0
	3 x I/O, digital, 24 V, D-Sub 15-way
	Interface for warning lamp red-green, foot switch, test result lamp
	Pin number probe for test point identification
	Safety loop for the protection of the work place

	I/O interface with 8, 16 or 24 opto-decoupled inputs and potential-free outputs (option)
	RJ12 interface for the connection of a temperature and humidity sensor
	External LCR measuring bridge and digital multimeter (option)
Scope of delivery	NT 700, main cable, pin number probe, USB flash drive with NT Control and detailed documentation

Measurement electronics MT20

Low voltage test	
Test voltage	1 – 25 V programmable in steps of 1 V ($\pm 3\%$, min. 0.2 V)
Test current	max. 25 mA
Threshold continuity test	1 Ohm – 1 kOhm ($\pm 5\%$, min. 1 Ohm)
Threshold short-circuit test	20 kOhm – 1 MOhm ($\pm 5\%$) Option: up to 5 MOhm ($\pm 20\%$ at test voltages ≥ 20 V)
Component test	
Resistors	1 Ohm – 1 MOhm ($\pm 5\%$, min. 1 Ohm) Option: up to 5 MOhm ($\pm 20\%$ at test voltages ≥ 20 V)
Capacitors	10 nF – 20 mF ($\pm 10\%$) Option: from 100 pF ($\pm 10\%$, ± 20 pF)
Diodes	Forward voltage: < 1.0 V Reverse voltage: max. 25 V
Zener diodes	Forward voltage: < 3.0 V Zener voltage: max. 20 V ($\pm 10\%$)
LEDs	Forward-Voltage: < 4.0 V Reverse voltage: max. 25 V
Suppressor diode	Break-down voltage: 3 V – 23 V ($\pm 10\%$)

Conditions for all tolerance statements: operating mode „Precise Mode“, earthbound operation, environmental conditions 15 – 35 °C / 20 – 60 % rel. humidity (non-condensing)

The statements for the component test refer to the test of single components, which are connected separately with test points.

Technical data and tolerances are subject to change depending on a specific ambient of the test object or application.