

# 100,000-count TRMS Graphic digital multimeters

MTX 3281B MTX 3282B MTX 3283B



From the laboratory to the field, a single, comprehensive diagnostic instrument offering top performance!

- Large graphic LCD display, bilingual menus (French/English)
- New LED backlighting for easier reading and lower power consumption
- Four 100,000-count digital displays, bargraph and graphic measurement log
- Basic accuracy 0.02 %, specified bandwidth 200 kHz
- 8-key "virtual" measurement selector with "one-handed" direct access
- Frequency measurements up to 2 MHz, durations, duty cycle, counting of events
- Temperature measurements with Pt 100 or Pt 1000 probes and J or K thermocouples
- Storage of 6,500 measurements with date and time (up to 4 simultaneous parameters)
- Optical RS232, USB or Bluetooth communication
- 50 %-faster battery recharging with the new Wall Plug mains power pack.



# Uncompromising performance in the

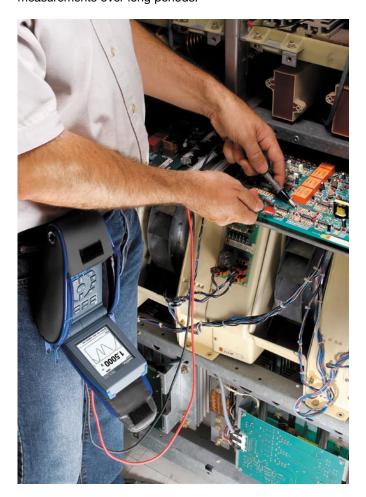
### Metrological accuracy

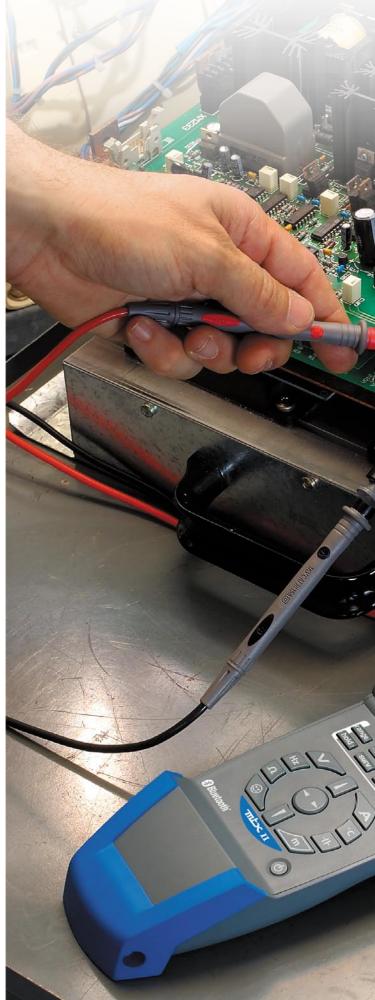
At its launch, the ASYC2 range from Metrix® established a new standard in metrological performance, both for its high-performance specifications and its entirely new "closedcasing" adjustment functions, representing a breakthrough in field instrument technology. The latest ASYC3 range (MTX Mobile) continues this tradition of innovation, with topof-the-range handheld multimeters offering a resolution of 100,000 counts, 0.02 % basic accuracy and a 200 kHz bandwidth, features that set them apart from the competition. The customer calibration software, available as an option, makes periodic checking simpler, quicker and more economical.

### **Specially designed** for laboratory and field use

Their unique design, featuring a multidirectional screen and electronic control switch, makes this range of instruments ideally suited for both benchtop and one-handed use.

The power supply system is equally innovative, offering all the benefits of a modern instrument, with rechargeable batteries for on-site use and a mains adapter doubling as a battery charger for lab use. This means you no longer have to worry about the instrument shutting down due to low power during measurements over long periods.





# laboratory and on-site The new Wall Plug switching power pack is multi-voltage. Different according to the country, it is now available with the MTX 3282B and MTX3283B models. It reduces the average charging time of the batteries which have approximately 50 % more capacity than the original models. The MTX Mobile gives a precise indication of the battery's remaining capacity. 1.5000 % The self-extinguishing, moulded, on-site casing is resistant and benefits from an IP 51 protection rating. Effective design: flawless ergonomics Compact and protected when closed, the models in the ASYC3 range are particularly easy to handle because of their shape and their "slim-line" casing. The measurement functions can be selected directly with the hand holding the instrument by simply pressing the required key in the electronic control pad. In addition, a specially-designed carrying pouch leaves both hands free to deal with the required lead connections.

# Uncompromising performance in the



# Unprecedented display features for this type of instrument

For greater reading comfort, the range features an extralarge multidirectional multi-display screen with an analogue bargraph and **LED backlighting**. This new backlighting system **improves the contrast in bright light**, making it easier to read, while also **significantly reducing power consumption**.

The multimeter display remains easy to read whatever the instrument's position during use.

The modes and functions selected, the physical and electrical quantities measured and any relevant warning symbols are all clearly displayed on the instrument's high-resolution 160 x 160-pixel graphic display.

Depending on the function selected, the results are displayed either in mixed digital/graphic mode or in digital mode only.

The **4-display system** means you can view all the required measurements simultaneously, while limiting the number of necessary operations to the minimum (measurement combinations, SPEC, REL, MEM, SURV).

### In mixed display

mode, the particularly legible digital display offers stable, accurate measurement readings, while rapid variations are clearly indicated by

the bargraph. A further dimension is provided by the instrument's graphic recorder, which shows the measurement variations over time.

All the operating menus and help windows are available in two languages (English and French).

# laboratory and on-site

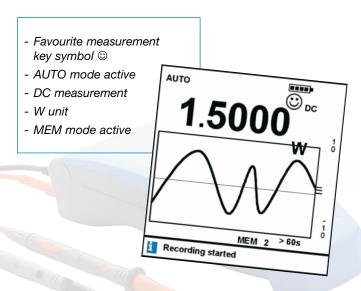
# Multimeters with fingertip control

These are the only instruments of their kind equipped with an electronic control switch to replace traditional mechanical switches (the primary cause of malfunctions on conventional hand-held multimeters), thus guaranteeing performance and safety. In addition, direct-access one-touch controls remove the need for the intermediate positions found on conventional mechanical control switches.

The principal measurements are instantly accessible with the instrument's 6 direct-access keys, so it is no longer necessary to choose between the 4 or 5 positions required by conventional mechanical switches for simple voltage or current measurements.



A "favourite measurement" key allows users to program automatic access to the measurement mode they use the most. Whatever the physical quantity measured, this key enables you to convert the scale and define the appropriate measurement unit in order to obtain direct readings of the original quantity.



### **Technology serving safety**

Lead/command consistency is managed entirely by the multimeter, which automatically selects the corresponding function when it detects a lead on the Ampere or Volt terminals. When a lead is connected to the Volt terminal, for example, the instrument automatically proposes to check for the presence of a voltage before carrying out resistance or capacitance measurements.

On the practical side, the Ampere input's single HRC fuse has made it possible to reconcile the instrument's compact design with the increased safety distances required for compliance with IEC standards 61010 1,000 V / Cat. III, 600 V / Cat. IV. This innovation is also an effective safeguard against wiring errors, which may destroy the safety fuse that normally provides protection during current measurements.



Thanks to technological improvements resulting in a single "A" terminal, current measurements are performed using a single switch position, allowing smooth changes of the measurement range from just a few hundred micro-Amperes to up to 20 Amperes.

It is even possible to carry out current and voltage measurements simultaneously, using 3 measurement leads, and display the "V x A" result.



For greater efficiency and safety when working, the instrument proposes only 3 measurement terminals.

When the removable lead is connected to the Ampere or Volt terminal, the corresponding function is automatically selected in AC+DC mode, complete with auto-ranging, thus reducing handling to a minimum.

## Uncompromising performance in the laboratory and on-site

### Total control of measurement

With the new AUTOPEAK mode, current or voltage range changes are now based on the rapid acquisition of peaks, in order to avoid untimely overruns of the instrument's Crest Factor, which may cause measurement errors without the user being aware of it. This means there is no longer any limitation of the crest factor except with the instrument's 1,000 V range.

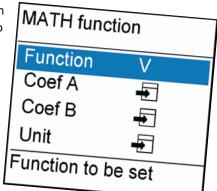
Another innovative feature is the instrument's **SPEC** function, which automatically displays measurement tolerances without users having to search for them or calculate them.

In this way, users are in full control of the measurement uncertainties, whatever the range or the AC signal frequency.

# Innovative functions for all-round measurement performance

Thanks to their **MATH** function, the models in the ASYC3 Series are ideal for measuring varied physical quantities. This function means users can measure a physical quantity in Volts, Amperes, Hertz or Ohms, convert the quantity and assign the appropriate unit to it, in order to obtain a direct reading on the secondary display.

This type of function can be assigned directly to the "Favourite measurement" key so that it can be activated instantaneously.



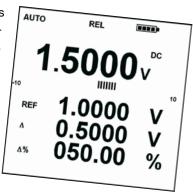
Another frequent application involves testing the attenuation and bandwidth of electronic circuits.

The **dB** function on the ASYC3 Series enables you to directly display all the information you need, including voltage, frequency and attenuation in dB compared with the reference value.

Thanks to the instrument's 4 digital displays, the relative function **REL** provides comprehensive simultaneous display of the absolute value, the absolute deviation, the percentage deviation and the reference value.

In addition, the reference value can be adjusted simply and directly using the

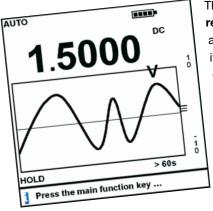
**REL** function key.



# Everything you need to track down faults

The functions provided by the multimeter and recorder integrated in the ASYC3 Series models make them ideal partners in the field for maintenance, adjustment and even R&D.

Wherever you find electronics, whether in industrial processes, production equipment or energy distribution, the ASYC3 Series offers genuine advantages...



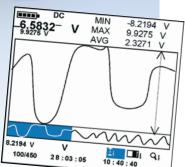
The ASYC3 Series' graphic recorder window offers an extra dimension with its at-a-glance graphic display of measurement variations over time.

The **SURV key** can be used to display and record simultaneously the minimum, maximum and average values of a measurement, as well as the dates/times of the extreme values and the start and

values and the start and end of monitoring. AUTO SURV Start: 27/03/2005 10:07:11 Stop: 27/03/2005 10:10:3 AVG Mini: -1.0000 V 27/03/2005 10:08 Max: 2.5000 V 10:09:25 27/03/2005 Avg: 1.3000 V



For even more detail, the **MEM key** records up to 6,500 time/date-stamped measurements at intervals ranging from 1 s to 24 h so that they can be analysed graphically on the instrument. This function can be used for 1, 2, 3 or even 4 simultaneous measurements.



Thanks to its PC-compatible analysis software, these measurement results may be exported in real-time or deferred mode, enabling you to store, analyse, document and transfer data into a standard spreadsheet application.

To complete this all-round performance, the measurement of rapid one-off or periodic 250 µs peaks with the instrument's **PEAK** function makes it possible to pinpoint anomalies which are normally undetectable using conventional multimeters, so that users can make an initial diagnosis of the signal types based on the **Crest Factor** displayed.

# Modern, universal communication

Universal communication suitable for all working environments is provided by optically-isolated RS232 and USB ports alongside built-in Bluetooth technology.

**Metrix**<sup>®</sup> also offers an expanding range of customer services, including a user "hot-line" and our support site, **www.chauvin-arnoux.com**, "customer" calibration software and an extensive after-sales service network.



### **Models / References**

	MTX3281B
Basic versions*	MTX3282B
	MTX3283B
	MTX3281B-COM
Basic versions + RS232 kit + USB	MTX3282B-COM
	MTX3283B-COM
	MTX3281B-BT
Basic versions + Bluetooth	MTX3282B-BT
	MTX3283B-BT
Kit versions:	
(basic versions + case no. 2 + HX0052	MTX3281B-P
+ MN 09 clamp + set of crocodile clips	MTX3282B-P
(1 red / 1 black) + set of wire grips	MTX3283B-P
(1 red / 1 black)	
K thermocouple measurement adapter	P06239306

### \* Accessories supplied:

1 set of Ø 4 mm banana leads, 1 set of 3 x LR6 batteries (1) or 1 set of 3 AA NiMH rechargeable batteries (2)(3), 1 mains adapter/charger (2)(3), 1 HRC fuse 10 x 38 mm 1,000 V -T11 A-20 kA and a short operating manual in 5 languages.

### **Optional accessories**

(or depending on versions)

Communication kit (RS232 optical cable + PC software)	HX0050
Set of 3 AA NiMH rechargeable batteries	HX0051
Transport and "hands-free" kit	HX0052
Fast charge kit Fast charger + 3 AA NiMH rechargeable batteries	HX0053
USB/RS232 adapter for PC	HX0055
Optical cable/USB	HX0056-Z
USB/Bluetooth adapter for PC	P01637301
Measurement adapter for K thermocouple	P06239306

AC and AC+DC basic accuracy  1.0 % R + 30 D (1)  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)	Specifications   Graphic Politic resolution 160 x 160 - 100,000-count digital displays	FECHNICAL SPECIFICATIONS	MTX3281B (1)	MTX3282B (2)	MTX3283B (3)		
Modes Main display + bargraph + (graphic or selection of 3 secondary displays)  Measurement connections 3 measurement terminals (N, A, COM) - Automatic detection and selection of 1 secondary displays)  Measurement terminals (N, A, COM) - Automatic detection and selection of 1 secondary displays)  Virtual measurement selector with 8 "one-handed" direct access keys - "Favourite function" key Ergonomics 2 complete languages (French, English) - Configuration menu & browser - On-line help DC, AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 V  DC basic accuracy 0.1 % R + 8 D (1) 0.03 % R + 8 D (2) 0.02 % R + 8 D (3)  AC and AC+DC basic accuracy 0.7 % R + 40 D (1) 0.3 % R + 40 D (2) 0.3 % R + 40 D (2) 0.3 % R + 40 D (3) DC basic accuracy 0.8 % R + 8 D (1) 0.8 % R + 8 D (2) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3)  AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μ to 20,000 Å (max. 30 s)  DC basic accuracy 0.8 % R + 8 D (1) 0.8 % R + 8 D (2) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3)  AC and AC+DC basic accuracy 1.0 % R + 30 D (1) 0.3 % R + 50 D (2) 0.3 % R + 30 D (3) Specified bandwidth DC at 20 kHz (1) DC at 50 kHz (2) DC at 50 kHz (2) DC at 50 kHz (2) DC at 50 kHz (3)  Frequency & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D DUty cycle Pos. and neg. pulses (2) (3) Counting of up to 99,999 pulses, measurement of durin from 100 µs to 12.5 s  Elapsed time Graph of events with zoom and measurement currors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 100,000 Q to 5 8.000 MHz  Resistance & continuity / 6 automatic or manual ranges from 100,000 Q to 5 8.000 MHz  Resistance & Continuity / 6 automatic or manual ranges from 100.000 Q - response time 5 ms  Didde test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA  Resistance & Continuity / 6 automatic or manual ranges from 100.00 Ft to 10.00 mF – 1 % R + 5 D – Measurement time < 2 s (for C < 100 μF)	Modes   Main display + bargraph + (graphic or selection of 3 secondary displays)	MAN-MACHINE INTERFACE					
Measurement connections  3 measurement terminals (v, A, COM) - Automatic detection and selection of Vac+oc or Iac+oc Controls  Virtual measurement selection with 8 "one-handed" direct access keys - "Favourite function" key. 2 complete languages (French, English) - Configuration menu & browser - On-line help DC, AC and AC+DC voltages / 5 automatic or manual ranges from 100,000 mV to 1,000,000 V  NC basic accuracy  0.1 % R + 8D (t)  0.03 % R + 40 D (2)  0.3 % R + 40 D (2)  0.3 % R + 40 D (3)  Specified bandwidth  DC at 50 kHz (1)  DC at 100 kHz (2)  DC at 200 kHz (3)  NC and AC+DC basic accuracy  0.08 % R + 8D (1)  0.08 % R + 8D (2)  0.08 % R + 8D (2)  0.08 % R + 8D (3)  NC and AC+DC currents / 6 automatic or manual ranges from 100,000 μA to 20,000 A (max. 30 s)  NC basic accuracy  0.08 % R + 8D (1)  0.08 % R + 8D (2)  0.08 % R + 8D (2)  0.08 % R + 8D (3)  NC and AC+DC basic accuracy  1.0 % R + 3D D (1)  0.3 % R + 3D D (2)  0.3 % R + 3D D (3)  NC and AC+DC basic accuracy  1.0 % R + 3D D (1)  0.3 % R + 3D D (2)  0.3 % R + 3D D (3)  NC and AC+DC basic accuracy  1.0 % R + 3D D (1)  NC at 10 kHz (2)  DC at 50 kHz (3)  NC and AC+DC basic accuracy  1.0 % R + 3D D (1)  NC at 50 kHz (2)  NC at 50 kHz (2)  NC at 50 kHz (3)  NC at 50 kHz (2)  NC at 50 kHz (3)  NC	Main display + bargraph + (graphic or selection of 3 secondary displays) assurement connections  3 measurement terminals (V. A. COM) - Automatic detection and selection of Vac+αc or Iac+αc portrols  Virtual measurement selector with 8 "one-handed" direct access keys - "Favourite function" key gonomics  2 complete languages (French, English) - Configuration menu & browser - On-line help C, AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 v C basic accuracy  0.1 % R + 8 D (1) 0.33 % R + 8 D (2) 0.3 % R + 40 D (2) 0.3 % R + 40 D (3) 0.3 % R + 40 D (2) 0.3 % R + 40 D (3) 0.6 and AC+DC basic accuracy 0.7 % R + 40 D (1) 0.7 % R + 40 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (1) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.8 % R + 8 D (2) 0.8 % R + 8 D (3) 0.9 % R + 8 D (3) 0.0		Multidirectional graph	nic LCD (58 x 58 mm) - Adjustable o	contrast - LED backlighting		
Measurement connections Virtual measurement selector with 8 "one-handed" direct access keys: "Favourite function" key Ergonomics 2 complete languages (French, English) - Configuration menu & browser - On-line help DC, AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 V  DC basic accuracy 0.1 % R + 8 D (1) 0.3 % R + 8 D (2) 0.0.2 % R + 8 D (3) AC and AC+DC basic accuracy 0.7 % R + 40 D (1) 0.3 % R + 8 D (2) 0.0.3 % R + 40 D (2) 0.5 Specified bandwidth DC at 50 kHz (1) DC at 100 kHz (2) DC at 200 kHz (3) DC, AC and AC+DC Currents / 6 automatic or manual ranges from 100.000 μA to 20.000 A (max. 30 s) DC basic accuracy 0.08 % R + 8 D (1) 0.08 % R + 8 D (2) 0.08 % R + 8 D (3) DC, AC and AC+DC basic accuracy 0.08 % R + 8 D (1) 0.08 % R + 8 D (2) 0.08 % R + 8 D (3) DC basic accuracy 0.08 % R + 30 D (1) 0.3 % R H + 30 D (2) 0.3 % R H + 30 D (2) 0.3 % R H + 30 D (2) 0.3 % R H + 30 D (3) DC basic accuracy 0.08 % R + 8 D (1) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3	Seasurement   Connections   Seasurement terminals (V, A, COM) - Automatic detection and selection of Vac+oc or Iac+oc	Specifications	Graphic r	esolution 160 x 160 - 100,000-coun	t digital display		
Controls   Virtual measurement selector with 8 "one-handed" direct access keys - "Favourite function" key 2 complete languages (French, English) - Configuration menu & browser - On-line help 20, AC and AC+DC voltages / 5 automatic or manual ranges from 100,000 mV to 1,000,00 V	Virtual measurement selector with 8 "one-handed" direct access keys - "Favourite function" key gonomics   2 complete languages (French, English) - Configuration menu & browser - On-line help	Modes	Main display +	bargraph + (graphic or selection of	3 secondary displays)		
2 complete languages (French, English) - Configuration menu & browser - On-line help	2 complete languages (French, English) - Configuration menu & browser - On-line help 2, AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 V C and AC+DC basic accuracy 0.1 % R + 8 D (1) 0.03 % R + 40 D (2) 0.3 % R + 40 D (3) 0.6 and AC+DC basic accuracy 0.7 % R + 40 D (1) 0.3 % R + 40 D (2) 0.3 % R + 40 D (2) 0.5 % R + 40 D (3) 0.6 and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s) C and AC+DC basic accuracy 0.08 % R + 8 D (1) 0.08 % R + 8 D (2) 0.08 % R + 8 D (3) 0.3 % R + 30 D (2) 0.3 % R + 30 D (3) 0.6 and AC+DC basic accuracy 0.08 % R + 8 D (1) 0.08 % R + 8 D (2) 0.08 % R + 8 D (3) 0.3 % R + 30 D (2) 0.3 % R + 30 D (3) 0.6 and AC+DC basic accuracy 0.0 % R + 8 D (1) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (3) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (3) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (4) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (3) 0.0 % R + 8 D (2) 0.0 % R + 8 D (3) 0.0 % R + 8 D (4) 0.0 % R + 8 D (2) 0.0 % R + 8 D (4) 0.	Measurement connections	3 measurement terminals	(V, A, COM) - Automatic detection a	nd selection of Vac+DC or lac+DC		
DC   AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 V	C. AC and AC+DC voltages / 5 automatic or manual ranges from 100.000 mV to 1,000.00 V C basic accuracy	Controls	Virtual measurement select	or with 8 "one-handed" direct acces	ss keys - "Favourite function" key		
OC basic accuracy	C basic accuracy  0.1 % R + 8 D (1)  0.03 % R + 8 D (2)  0.02 % R + 8 D (3)  0.02 % R + 8 D (3)  0.03 % R + 40 D (2)  0.3 % R + 40 D (3)  0.5 and AC+DC basic accuracy  0.7 % R + 40 D (1)  0.3 % R + 40 D (2)  0.3 % R + 40 D (3)  0.5 at 200 kHz (3)  0.6 at 200 kHz (3)  0.7 % R + 8 D (1)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.8 % R + 8 D (2)  0.8 % R + 8 D (3)  0.9 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (3)  0.0 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (3)  0.0 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (2)  0.0 0.8 % R + 8 D (3)  0.0 0.8 % R + 8 D (2)  0.0 0.3 % R + 3 D D (3)  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Ergonomics	2 complete languages	(French, English) - Configuration me	enu & browser - On-line help		
AC and AC+DC basic accuracy  0.7 % R + 40 D (1)  0.3 % R + 40 D (2)  0.3 % R + 40 D (3)  Specified bandwidth  DC at 50 kHz (1)  DC at 1000 kHz (2)  DC at 200 kHz (3)  DC, AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s)  DC basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (2)  0.08 % R + 8 D (2)  0.08 % R + 8 D (3)  AC and AC+DC basic accuracy  1.0 % R + 30 D (1)  0.3 % R + 30 D (2)  0.3 % R + 30 D (3)  Specified bandwidth  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (3)  Engreuery & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D  DUtty cycle  Rated range 5 to 95 % – Resolution 0.01 %  Pos. and neg. pulses (2) (3)  Counting of up to 99.999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Valid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power Ur/R or R x I² (3)  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power Ur/R or R x I² (3)  Automatic management of ranges to comply with the Crest Factor of the instrument of the form file accuracy of the unit for physical quantities (y = Ax + B unction and unit definable)  Acquisition of data (up to 4 measure	C and AC+DC basic accuracy  0.7 % R + 40 D (1)  0.3 % R + 40 D (2)  0.3 % R + 40 D (3)  0.6 iffed bandwidth  DC at 50 kHz (1)  DC at 100 kHz (2)  DC at 200 kHz (3)  C, AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s)  C basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (2)  0.08 % R + 8 D (3)  C and AC+DC basic accuracy  1.0 % R + 30 D (1)  0.3 % R + 30 D (2)  0.3 % R + 30 D (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (3)  DC at 50 kHz (3)  Bated range 5 to 95 % - Resolution 0.01 %  Saled arange 5 to 95 % - Resolution 0.01 %  Saled accuracy  3. Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Based time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Dote the continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Dote test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Bapeditance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Basic accuracy  0.1 % R + 8 D (1)  DC at 50 kHz (2)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  DOTE to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Bapeditance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Basic accuracy  0.1 % R + 8 D (1)  DO A C S S S S S S S S S S S S S S S S S S	DC, AC and AC+DC voltages / 5 auto	matic or manual ranges from 100	.000 mV to 1,000.00 V			
Specified bandwidth  DC at 50 kHz (1)  DC at 100 kHz (2)  DC at 200 kHz (3)  DC, AC and AC+DC currents / 6 automatic or manual ranges from 100.00 μA to 20.000 A (max. 30 s)  DC basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (3)  AC and AC+DC basic accuracy  1.0 % R + 30 D (1)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (4)  DC at 50 kHz (4	DC at 50 kHz (1)  DC at 100 kHz (2)  DC at 200 kHz (3)  C, AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s)  C basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (3)  Decified bandwidth  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (3)  Decified bandwidth  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  Education from 100 μs to 12.5 s  DC at 50 kHz (2)  DC at 50 kHz (3)  Education 6.05 kHz (2)  DC at 50 kHz (2)  DC at 5	DC basic accuracy	0.1 % R + 8 D (1)	0.03 % R + 8 D (2)	0.02 % R + 8 D (3)		
DC, AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s) DC basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (2)  0.08 % R + 8 D (2)  0.3 % R + 30 D (3)  AC and AC+DC basic accuracy  1.0 % R + 30 D (1)  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  Frequency & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D  Duty cycle  Rated range 5 to 95 % - Resolution 0.01 %  Pos. and neg. pulses (2) (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Dioide test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Measurement in dBm (3))  Resolution 10.0 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument of the potential o	C, AC and AC+DC currents / 6 automatic or manual ranges from 1000.00 μA to 20.000 A (max. 30 s) C basic accuracy 0.08 % R + 8 D (1) 0.08 % R + 8 D (2) 0.08 % R + 8 D (3) C and AC+DC basic accuracy 1.0 % R + 30 D (1) 0.3 % R + 30 D (2) 0.3 % R + 30 D (3) DC at 50 kHz (2) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at	AC and AC+DC basic accuracy	0.7 % R + 40 D (1)	0.3 % R + 40 D (2)	0.3 % R + 40 D (3)		
AC and AC+DC basic accuracy  1.0 % R + 8 D (1)  1.0 % R + 30 D (1)  1.0 % R + 30 D (2)  1.0 % R + 30 D (2)  1.0 % R + 30 D (3)  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50	C basic accuracy  0.08 % R + 8 D (1)  0.08 % R + 8 D (2)  0.08 % R + 8 D (3)  C and AC+DC basic accuracy  1.0 % R + 30 D (1)  0.3 % R + 30 D (2)  0.3 % R + 30 D (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 50 kHz (3)  DC at 50 kHz (2)  DC at 5	Specified bandwidth	DC at 50 kHz (1)	DC at 100 kHz (2)	DC at 200 kHz (3)		
AC and AC+DC basic accuracy  1.0 % R + 30 D (1)  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (3)  Easic accuracy 0.02 % R + 8 D  DC at 50 kHz (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Caraph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Adulble continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2,6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Dther measurements  V Peak > 250 μs and crest factor  Walid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resolution (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Dther functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Triple secondary display: adjustable reference, relative value, deviation in %  SURV function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+8 function and unit definable)  Acquisition of data (up to 4 measurements at o	2 and AC+DC basic accuracy 1.0 % R + 30 D (1) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 kHz (3) DC at 50 kHz (3) DC at 50 kHz (2) DC at 50 k	DC, AC and AC+DC currents / 6 auto	matic or manual ranges from 100	0.00 μA to 20.000 A (max. 30 s)			
Specified bandwidth  DC at 20 kHz (1)  DC at 50 kHz (2)  DC at 50 kHz (3)  Frequency & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D  Duty cycle  Rated range 5 to 95 % – Resolution 0.01 %  Pos. and neg. pulses (2) (3)  Counting of up to 99.999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D – Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Weasurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW – Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW – Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D HoLD & AUTOHOLD function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+8 function and unit definable)  MEM function  MEM function	DC at 20 kHz (1) DC at 50 kHz (2) DC at 50 kHz (3)  equency & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D  aty cycle Rated range 5 to 95 % - Resolution 0.01 %  be as and neg. pulses (2) (3) Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  apsed time Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  asic accuracy 0.1 % R + 8 D (1) 0.07 % R + 8 D (2) 0.07 % R + 8 D (3)  adible continuity detection Range 1,000.00 Ω - response time 5 ms  ode test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA  appacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  appacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  appacitance / Jo r K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  there measurements  Peak > 250 μs and crest factor  assurement in dBm (3)) Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  3 function (3) Triple secondary display: signal frequency, variation in dB compared with reference, MATH function ther functions  JTOPEAK function (2) (3) Automatic management of ranges to comply with the Crest Factor of the instrument Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D D DLD & AUTOHOLD function Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping ACH function of Monitoring and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements at once) - Interval from 1 s to 24 h	DC basic accuracy	0.08 % R + 8 D (1)	0.08 % R + 8 D (2)	0.08 % R + 8 D (3)		
Rated range 5 to 95 % - Resolution 0.01 %   Rated range 5 to 95 % - Resolution 0.01 %	equency & period / 7 automatic or manual ranges from 10.0000 Hz to 2.0000 MHz – Basic accuracy 0.02 % R + 8 D         and neg. pulses (2) (3)       Rated range 5 to 95 % - Resolution 0.01 %         ps. and neg. pulses (2) (3)       Counting of up to 99,999 pulses, measurement of duration from 100 µs to 12.5 s         apsed time       Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)         asistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ         asistance & continuity detection       Range 1,000.00 Ω - response time 5 ms         ode test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA         apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D – Measurement time < 2 s (for C < 100 µF)         Intermeasurements       Peak > 250 µs and crest factor         Peak > 250 µs and crest factor       Valid for one-off or periodic phenomena         aesurement in dBm (3))       Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω         Pesistive power U²/R or R x I² (3)       Resolution 100 µW - Adjustable reference from 1 Ω to 10 000 Ω         Bright function (3)       Triple secondary display: signal frequency, variation in dB compared with reference, MATH function         ThOPEAK function (2) (3)       Automatic management of ranges to comply with the Crest Factor of the instrument         PCC function       Calculation of measurement tolerance in the form Min & Max Values, and x % R	AC and AC+DC basic accuracy	1.0 % R + 30 D (1)	0.3 % R + 30 D (2)	0.3 % R + 30 D (3)		
Pos. and neg. pulses (2) (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  Vereak > 250 μs and crest factor  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Besolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function Other functions  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Rated range 5 to 95 % - Resolution 0.01 %  Date and neg. pulses (2) (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Rapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Raici accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Range 1,000.00 Ω - response time 5 ms  Range 1,000.00 Ω - response time 5 ms  Rapsel time (2) (3)  Resolution 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Repeature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Resolution (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function the functions  Therefore tructions  Automatic management of ranges to comply with the Crest Factor of the instrument Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  DLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Specified bandwidth	DC at 20 kHz (1) DC at 50 kHz (2) DC at 50 kHz (3)				
Pos. and neg. pulses (2) (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Elapsed time  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Dioide test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Weasurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	So, and neg. pulses (2) (3)  Counting of up to 99,999 pulses, measurement of duration from 100 μs to 12.5 s  Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Besistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Besistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  O.1 % R + 8 D (1)  Range 1,000.00 Ω - response time 5 ms  ode test / 0 to 2,6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA  Basic accuracy  Basic accuracy  Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D – Measurement time < 2 s (for C < 100 μF)  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy 2 % R + 30 D – measurement current approx.  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic accuracy  Basic accuracy  Basic accuracy  Walid for one-off or periodic phenomena  Basic accuracy  Basic ac	Frequency & period / 7 automatic or i	manual ranges from 10.0000 Hz t	o 2.0000 MHz – Basic accuracy 0.	02 % R + 8 D		
Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3)  Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Walid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Triple secondary display: adjustable reference, relative value, deviation in % Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  MACQuisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Graph of events with zoom and measurement cursors: Relative mode (1) or Date/Time (2) (3) esistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ accuracy 0.1 % R + 8 D (1) 0.07 % R + 8 D (2) 0.07 % R + 8 D (3) adible continuity detection Range 1,000.00 Ω - response time 5 ms ode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF) apacitance / Jor K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3) and ther measurements  Peak > 250 μs and crest factor  Peasurement in dBm (3)) Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Brunction (3) Triple secondary display: signal frequency, variation in dB compared with reference, MATH function ther functions  JTOPEAK function (2) (3) Automatic management of ranges to comply with the Crest Factor of the instrument Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D DLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function Range from 1000,00 Ω Paces from 1000 Ω Paces from 10	Duty cycle	F	lated range 5 to 95 % - Resolution	0.01 %		
Resistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Weasurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Triple secondary display: adjustable reference, relative value, deviation in %  SURV function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Sesistance & continuity / 6 automatic or manual ranges from 1000,00 Ω to 50.000 MΩ  asic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Bange 1,000.00 Ω - response time 5 ms  ode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Imperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Ither measurements  Peak > 250 μs and crest factor  Beasurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Friple secondary display: signal frequency, variation in dB compared with reference, MATH function there functions  JTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  DLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Pos. and neg. pulses (2) (3)	Counting of up to 9	9,999 pulses, measurement of dura	tion from 100 µs to 12.5 s		
Basic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Valid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	asic accuracy  0.1 % R + 8 D (1)  0.07 % R + 8 D (2)  0.07 % R + 8 D (3)  adible continuity detection  Range 1,000.00 Ω - response time 5 ms  ode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  amperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  ther measurements  Peak > 250 μs and crest factor  valid for one-off or periodic phenomena  easurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  a function (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  ther functions  JTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  DLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Elapsed time	Graph of events with zoo	n and measurement cursors: Relati	ve mode (1) or Date/Time (2) (3)		
Audible continuity detection  Range 1,000.00 Ω - response time 5 ms  Diode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Valid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Adible continuity detection  Range 1,000.00 Ω - response time 5 ms  ode test / 0 to 2.6000 V - Accuracy 2 % R + 30 D - measurement current approx. 1 mA  apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF - 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Imperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Ither measurements  Peak > 250 μs and crest factor  Valid for one-off or periodic phenomena  easurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Bristive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  ther functions  JTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  DLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  Et function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  ACQuisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Resistance & continuity / 6 automatic	or manual ranges from 1000,00	$\Omega$ to 50.000 M $\Omega$			
Diode test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA  Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D – Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  Valid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm – Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Alb function (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Triple secondary display: adjustable reference, relative value, deviation in %  SURV function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	ode test / 0 to 2.6000 V – Accuracy 2 % R + 30 D – measurement current approx. 1 mA apacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D – Measurement time < 2 s (for C < 100 μF) apacitance / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  ther measurements  Peak > 250 μs and crest factor  easurement in dBm (3))  Resolution 0.01 dBm – Adjustable reference from 1 Ω to 10 000 Ω  Bisistive power U²/R or R x I² (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function (3)  ther functions  JTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument on the function (2) (3)  PEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  OLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  EL function  Triple secondary display: adjustable reference, relative value, deviation in %  JRY function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	-	0.1 % R + 8 D (1)				
Capacitance / Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Valid for one-off or periodic phenomena  Measurement in dBm (3))  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Resistive power U²/R or R x I² (3)  Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  REL function  Triple secondary display: adjustable reference, relative value, deviation in %  SURV function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Automatic or manual ranges from 10.00 nF to 10.00 mF – 1 % R + 5D - Measurement time < 2 s (for C < 100 μF)  Imperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Ither measurements  Peak > 250 μs and crest factor  Peak y	•	Range 1,000.00 Ω - response time 5 ms				
Temperature / J or K thermocouple probes and Pt 100 or Pt 1000 probes (2) (3)  Other measurements  V Peak > 250 μs and crest factor  Measurement in dBm (3))  Resistive power U²/R or R x I² (3)  dB function (3)  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Other functions  AUTOPEAK function (2) (3)  Automatic management of ranges to comply with the Crest Factor of the instrument  SPEC function  Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D  HOLD & AUTOHOLD function  REL function  Triple secondary display: adjustable reference, relative value, deviation in %  SURV function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  MATH function (2) (3)  Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)  Acquisition of data (up to 4 measurements at once) - Interval from 1 s to 24 h  Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	ther measurements  Peak > 250 μs and crest factor  Peasurement in dBm (3))  Pesistive power U²/R or R x I² (3)  Pesistive power U²/R or R x I² (4)  Pesistive pow	Diode test / 0 to 2.6000 V - Accuracy	2 % R + 30 D - measurement cu	rrent approx. 1 mA			
Other measurements         V Peak > 250 μs and crest factor       Valid for one-off or periodic phenomena         Measurement in dBm (3))       Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω         Resistive power U²/R or R x I² (3)       Resolution 100 μW - Adjustable reference from 1 Ω to 10 000 Ω         dB function (3)       Triple secondary display: signal frequency, variation in dB compared with reference, MATH function         Other functions         AUTOPEAK function (2) (3)       Automatic management of ranges to comply with the Crest Factor of the instrument         SPEC function       Calculation of measurement tolerance in the form Min & Max Values, and x % R + x D         HOLD & AUTOHOLD function       Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)         REL function       Triple secondary display: adjustable reference, relative value, deviation in %         SURV function       Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping         MATH function (2) (3)       Scaling and display of the unit for physical quantities (y = Ax+B function and unit definable)         MEM function       Storage of 4 x 150 measurements (1) or 6,500 measurements (2) (3)	Triple secondary display: signal frequency, variation in dB compared with reference, MATH function  Calculation of measurement to definition  Manual hold of display (HOLD) or automatic hold on stable measurement (AUTOHOLD)  Let function  Monitoring and storage of "MIN", "MAX", and "AVG" values with time/date-stamping  ATH function  (2) (3)  Valid for one-off or periodic phenomena  Resolution 0.01 dBm - Adjustable reference from 1 Ω to 10 000 Ω  Triple secondary display: signal frequency, variation in dB compared with reference, MATH function dB compared with reference, MATH function definition in dB compared with reference, MATH function definition de	Capacitance / Automatic or manual r	anges from 10.00 nF to 10.00 mF	- 1 % R + 5D - Measurement time	e < 2 s (for C < 100 μF)		
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MTX3281B (1)	MTX3282B (2)	MTX3283B (3)
Optical RS232 link, 9,600 to 38,400 baud - USB adapter - Bluetooth wireless link		
Emissions and immunity as per NF EN 61326-1, 1998 / IEC 61010, 2001 - Cat IV-600 V or Cat III-1,000 V		
3 LR6 batteries or AA NiMH rechargeable batteries / approx. 80 h (LR6 batteries)		
or 65 h (NiMH rechargeable batteries ) depending on use		
Multi-voltage switching power supply, 100-240 V ± 10 %, 50-60 Hz, 0.3 A		
Full charge time 7 hours 30 min (2,600 mAh rechargeable batteries)		
ABS V0 – Dimensions when closed (H/W/D): 44 x 85 x 180 mm - Weight: 400 g - Protection rating IP51		
	Optical RS232 link, 9, Emissions and immunity as per NI 3 LR6 batteries or AA or 65 h (N Multi-voltage switc Full charge time	Optical RS232 link, 9,600 to 38,400 baud - USB adapter - Emissions and immunity as per NF EN 61326-1, 1998 / IEC 61010, 20 3 LR6 batteries or AA NiMH rechargeable batteries / appror 65 h (NiMH rechargeable batteries ) dependent of Multi-voltage switching power supply, 100-240 V ± 10 Full charge time 7 hours 30 min (2,600 mAh recharge



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