Type Network Analyzer	PQ-Box 50			PQ-Box 150				PQ-Box 200		PQ-Box 300
Option	Basic	Light	Expert	Basic	Basic+	Light	Expert	T0	T1	HF
Data memory in Gbyte (memory optional)		1			4 (32)			4 (32)		8 (32)
Sampling frequency voltage		20,48 kHz			20,48 kHz			40,96 kHz		409,60 kHz
Sampling frequency current		20,48 kHz			20,48 kHz			40,96 kHz		40,96 kHz
Sampling frequency transient measurement		–			–			–	4 MHz	409,60 kHz
Input voltage (resolution)		4 (16-bit)			4 (24-bit)			4 (24-bit)		4 (24-bit)
Input current (resolution)		4 (16-bit)			4 (24-bit)			5 (24-bit)		5 (24-bit)
Bridging energy failure		1,5 h			4,0 h			4,0 h	3,5 h	3,5 h
IP protection		IP65			IP65			IP65		IP65
Analog input (1000 mV)	–	–	–	–	–	–	–	•	•	•
Binary input (0 - 250 V AC/DC)	–	–	–	–	–	–	–	•	•	•
Evaluation according to: EN50160 (2016) / IEC 61000-2-2 (2018) /IEC 61000-2-12/IEC 61000-2-4 (Class 1; 2; 3)/NRS048 /IEEE 519/VDE AR-4105	–	•	•	–	•	•	•	•	•	•
Recording free interval 1 sec to 30 min		•			•			•		•
Recording 200 ms interval & 3 sec interval parallel to free interval	–	–	•	–	–	•	•	•	•	•
Voltage, Current: ½ periode min. max. average	•	•	•	•	•	•	•	•	•	•
Current transients (I Peak)	–	–	–	•	•	•	•	•	•	•
Power: P, Q, S, PF, cos(φ) sin(φ), tan(φ)	•	•	•	•	•	•	•	•	•	•
Distortion-, fundamental reactive-, modulation- and unbalance power	•	•	•	•	•	•	•	•	•	•
Energy: P, Q, P+, P-, Q+, Q-	•	•	•	•	•	•	•	•	•	•
Flicker (Pst, Plt, Pinst)	–	•	•	–	•	•	•	•	•	•
Unbalanced voltage, current; positive sequence/ negative sequence	–	•	•	•	•	•	•	•	•	•
Voltage harmonics according IEC 61000-4-30 Ed. 3 Class A - to 50th	–	•	•	–	•	•	•	•	•	•
Voltage harmonics extreme values 2nd to 50th (200 ms RMS)	–	–	•	–	–	•	•	•	•	•
Phase angle of voltage and current harmonics	–	–	•	–	–	•	•	•	•	•
Voltage harmonics 200 Hz frequency bands - 2 kHz to 9 kHz (IEC 61000-4-7)	–	–	–	–	–	–	•	•	•	•
Voltage Supraharmonics 2 kHz - 170 kHz (200 Hz / 2 kHz frequency bands)	–	–	–	–	–	–	–	–	–	•
Current harmonics 2nd to 50th	–	•	•	–	•	•	•	•	•	•
Current harmonics extreme values 2nd to 50th (200 ms RMS)	–	–	•	–	–	•	•	•	•	•
Current harmonics 200 Hz frequency bands 2 kHz to 9 kHz (IEC 61000-4-7)	–	–	–	–	–	–	•	•	•	•
Phase angle of current harmonics according fundamental of voltage	–	–	•	–	–	•	•	•	•	•
THD U and THD I; PWHD U and I; PHC; TDD	•	•	•	•	•	•	•	•	•	•
Frequency spectrum with 5 Hz resolution up to (kHz)	–	10	–	–	10	20	170	•	•	•
Ripple control signal 100 Hz to 5 kHz (200 ms RMS max value)	–	–	•	–	–	•	•	•	•	•
Frequency, 10 sec, average-. min.- max-value	•	•	•	•	•	•	•	•	•	•
10/15/30 min interval P, Q, S, D, cos(φ), sin(φ), tan(φ) add to other interval	•	•	•	•	•	•	•	•	•	•
Online mode										
Oscilloscope recorder - sampling frequency		20,48 kHz			20,48 kHz			40,96 kHz		409,60 kHz
Power triangle 3D of active-, reactive, apparent power and distortion	–	•	•	•	•	•	•	•	•	•
Voltage harmonics and current harmonics	–	•	•	–	•	•	•	•		•
Online spectrum analysis	–	–	DC to 10 kHz	–	DC to 10 kHz			DC to 20 kHz		DC to 200 kHz
Voltage harmonics, current harmonics 200 Hz frequency band-2 kHz to 9 kHz	–	–	–	–	–	–	•	•	•	•
Supraharmonics up to 200 kHz (200 Hz or 2 kHz frequency band)	–	–	–	–	–	–	–	–	–	•
Direction of harmonics and phase angle of current harmonics	–	–	•	–	–	•	•	•	•	•
Triggerfunctions (Oscilloscope & ½ Periode RMS recorder)										
Manual trigger via button	–	–	–	–	•	•	•	•	•	•
RMS level trigger (U, I)	–	–	•	–	•	•	•	•	•	•
RMS jump trigger (U, I)	–	–	•	–	•	•	•	•	•	•
½ periode frequency trigger (level; df/dt)	–	–	•	–	–	•	•	•	•	•
Phase shift trigger	–	–	•	–	–	•	•	•	•	•
Envelope trigger	–	–	•	–	–	•	•	•	•	•
Interval-trigger, automatic trigger	–	–	•	–	–	•	•	•	•	•
Trigger on AUX input (differential current, temperature, etc.)	–	–	–	–	–	–	–	•	•	•
Trigger on binary input (0 - 250 V AC/DC signal; threshold 10 V)	–	–	–	–	–	–	–	•	•	•
Option R1 Ripple signal voltage and current recorder 100 Hz to 3 kHz	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1
Option S1 WLAN / Wifi interface	•	•	•	S1	S1	S1	S1	S1	S1	S1

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