

Specifications CLT10 Component Tester

Measuring Unit

Main Specification

Generator Frequency:	10kHz \pm 2 Hz
Voltmeter Frequency:	30 kHz
Voltmeter Bandwidth:	400 or 75 Hz selectable
Measuring Speed:	Measuring cycle down to 10 ms excl. handling. Specifications are valid for \geq 14ms cycle with broad voltmeter bandwidth. Test rate typically more than 30 components per second*)
Accuracy	\pm 1 dB or 5% + 1 digit

Component Range

General	All passive impedances. Primarily impedances within 100 Ω to 3 M Ω . Restrictions for other ranges exist
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Range switching time	<500 ms
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Range switching life	10 ⁶ operations
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<300 Ω

Transformation ratio	1:1
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Input impedance	100 Ω \pm 2%
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Max. power	0.2 VA @ $Z_x \geq 10 \Omega$ \pm 1 VA @ $Z_x \geq 50 \Omega$ \pm 4 VA @ $Z_x \geq 200 \Omega$
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Max. 10 kHz voltage	36 Vrms
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RNL @ 0.25 VA	-150 dB, typical -160 dB (30 to 300 Ω load)
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300 Ω - 3 k Ω

Transformation ratio	1:1
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Input impedance	1 k Ω \pm 2%
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Max. power	3 VA, 4 VA @ $Z_x \leq 2.5 \text{ kW}$
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Max. 10 kHz voltage	100 Vrms
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RNL @ 0.25 VA	-160dB
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3 k Ω - 30 k Ω

Transformation ratio	1:10
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Input impedance	10 k Ω \pm 2%
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Max. power	1 VA @ $Z_x \geq 5 \text{ k}\Omega$ €4 VA @ $Z_x \geq 25 \text{ k}\Omega$
Max. 10 kHz voltage	360 Vrms
RNL @ 0.25 VA	-1 50 dB, typical -160 dB
30 kΩ - 3 MΩ	
Transformation ratio	1:10
Input impedance	100 k Ω \pm 2%
Max. power	4 VA @ $Z_x \leq 250 \text{ k}\Omega$ € 1 VA @ $Z_x \leq 1 \text{ M}\Omega$ €0.25VA @ $Z_x < 3 \text{ M}\Omega$
Max. 10 kHz voltage	1000 Vrms
RNL @ 0.25 VA	-140dB, typical -150 dB @ $Z_x \leq 300 \text{ k}\Omega$ €-130dB @ $Z_x \leq 3 \text{ M}\Omega$
<u>Inputs/Outputs (rear)</u>	
Type of connector	25-pole, sub-D, female
Inputs	
Min.10 kHz level setting	0 to 10 V for 0 to 100% voltage output within range
10 kHz voltage off	Contact closure
External trigger	Contact closure
Outputs	
10 kHz voltage	0 to 10 V for 0 to 100% within actual range
10 kHz current	'0 to 10 V for 0 to 200 mA
30 kHz voltage	0 to 10 V for 0 to 100% within actual range
Control Outputs	
Impedance range	Open collector
Accept, go	Open collector
Reject, high & low	Open collector
10kHz voltage on	Open collector
Data Ready (DRDY)	TTL compatible
Measurement End (ME)	TTL compatible
Communication with Control Unit	
Type of connector	Fiber Optic Link
Type of interface	2 Mbit/s serial, bi-phase modulation

Safety Link	Contact closure
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Terminals (front)

Measuring terminals	Two binding posts accept standard-size 4 mm banana plugs
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General

Temperature

Operating temperature	5° to 45° C (41° to 113° F)
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Storage temperature	- 40° to 70° C (- 40° to 158° F)
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Relative humidity	20 to 80%, non-condensing
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Line voltage	90 to 111 V AC, 105 to 130 V AC, 180 to 222 V AC, 210 to 260 V AC.
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Frequency	47.5 to 63 Hz
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Power consumption	100 VA
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Dimensions and Weight

Height	178 mm (6.9")
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Width	483 mm (19.0")
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Depth	442 mm (17.0")
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Net weight	18 kg (40 lbs)
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Shipping weight	25 kg (55 lbs)
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Ordering Information

Code	Description
391-081	CLT 10 Measuring Unit

Accessories

983-436	Service Manual
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983-437	Operator Manual
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900-215	Measuring cable
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906-362	Control Unit connector cable, 1m
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618-101	Control Unit connector cable, 5m
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*) Guideline only; depends on handling