

TRANSDUCERS

LT10U Programmable AC Voltage/ Frequency Transducer LT10I Programmable AC Current/ Frequency Transducer



True RMS measurments

Voltage measurement Current AC measurement Frequency Wide auxiliary supply Class Response time Free software Up to 500 VAC, 50/60 Hz and 16²/₃ Hz Up to 10 A 10 - 120 Hz 80 - 250 VAC/24-250 VDC 0.2 <100 ms

> Hugo Tillquist AB Box 1120, SE-164 22 Kista, Sweden Finlandsgatan 16, Stockholm Tel. Int +46 8 594 632 00 www.tillquist.com



Model LT10U

Model	LT10-U
Measured Quantities	U (Voltage), F (Frequency)
Input	
Voltage	P/N: LT10U-110000
Voltage range (Un)	50 – 500 V main voltage (nominal)
Measuring range	0,15 – 600 V TRMS
Configurable measuring range	0 – 500 V
Frequency	10 <u>4070</u> 120 Hz
Voltage	P/N: LT10U-110050
Voltage range (Un)	12,5 – 125 V main voltage (nominal)
Measuring range	0,003 – 160 V TRMS
Configurable measuring range	0 – 150 V
Frequency	10 <u>4070</u> 120 Hz
Voltage	P/N: LT10U-110053
Voltage range (Un)	12,5 – 125 V main voltage (nominal)
Measuring range	0,003 – 160 V TRMS
Configurable measuring range	0 – 150 V
Frequency	101518120 Hz
Supply voltage	
Power supply	24 – 250 VDC
	80 – 250 VAC, 50/60 Hz
Burden	max 6 VA
Bardon	

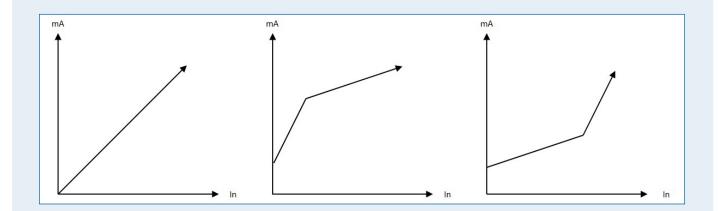
General data voltage

V	
Overload voltage	1,5 x Un – continuously
	2 x Un – 10 s
Measuring range F	10 – 120 Hz
Configurable measuring range	0 - 120 Hz
Consumption	< 0,5 VA



Model LT10U

Model	LT10-U
Output	
Analog	
Analog output	1
Range	0-20 mA (programmable)
	01 mA (class 0.5), 05 mA, 010 mA, 020 mA, 420 mA
External resistance load	max 750 ohm (15V)
Response time	< 100 ms
Individual characteristic	5 points





Model LT10I

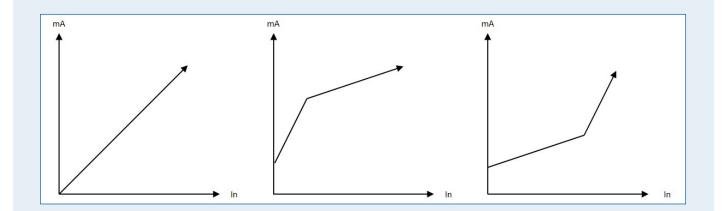
Model	LT10-I
Measured Quantities	I (Current), F (Frequency)
Input	
Current	P/N: LT10I-110000
Current (In)	1 – 5 A
Measuring range	0,005 – 12 A TRMS
Configurable measuring range	0 – 10 A
Frequency	10… <u>4070</u> …120 Hz
Current	P/N: LT10I-110003
Current (In)	1 – 5 A
Measuring range	0,005 – 12 A TRMS
Configurable measuring range	0 – 10 A
Frequency	101518120 Hz
General data current	

Overload current	2 x In continuously
	10 x ln 15 s
	20 x ln 1 s
Measuring range F	10 – 120 Hz
Configurable measuring range	0 – 120 Hz
Consumption	< 0.05 VA
Supply voltage	
Power supply	24 – 250 VDC
	80 – 250 VAC, 50/60 Hz
Burden	max 6 VA



Model LT10I

Model	LT10-I
Output	
Analog	
Analog output	1
Range	0-20 mA (programmable)
	01 mA (class 0.5), 05 mA, 010 mA, 020 mA, 420 mA
External resistance load	max 750 ohm (15V)
Response time	< 100 ms
Individual characteristic	5 points





Model LT10U and LT10I

General data	
Accuracy	0.2
Galvanic isolation	Supply in- and output are galvanically isolated
USB	Programming
	USB port is NOT galvanically isolated from output
Temperature	-10+55 °C (operation)
	-40+70 °C (storage)
Temperature coefficient	Less than 0.1% / 10 °C
Test voltage	5,6kV AC 50 Hz 1 min meas. input
	3,7kV AC 50 Hz 1 min aux. power supply
Installation category	CAT III; 600 V meas. input
	CAT III; 300 V aux. power supply
Pollution degree	2
Dimension (W x H x D)	35 x 109 x 126 mm – DIN-rail

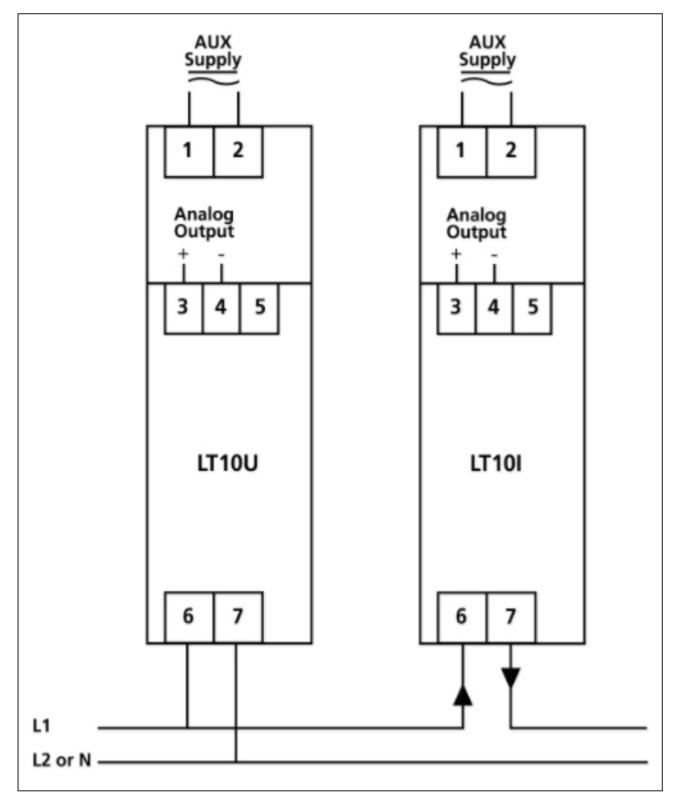
Standards

Stanuarus		
Transducers	Acc. To EN 60688	Electrical measuring transdcers for converting A.C. and D.C. electrical quantities to analogue or digital signals.
Safety	Acc. To EN 61010-1	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use.
EMC	Acc. To EN 61000-6-2	Generic standards - Immunity for industrial environments
	Acc. To EN61000-6-3:2007	Generic standards - Emission standard for industrial environments
	Acc. To EN 61000-6-4:2007	Generic standards - Emission standard for industrial environments
	Acc. To EN 61000-6-5	Generic standards - Immunity for equipment used in power station and substation environment
Order code		
	LT10U-110000, 0-500 V 50/60 Hz	LT10U Voltage/Frequency transducer class 0.2
	LT10U-110050, 0-125 V 50/60 Hz	LT10U Voltage/Frequency transducer class 0.2
	LT10U-110053 , 0-125 V 16⅔ Hz	LT10U Voltage/Frequency transducer class 0.2
	LT10I-110000, 0-5 A 50/60 Hz	LT10I Current/Frequency transducer class 0.2
	LT10I-110003 , 0-5 A 16⅔ Hz	LT10I Current/Frequency transducer class 0.2



Model LT10U and LT10I

Connection diagram





REVISION HISTORY	
A1	160524
A2	161026
A3	170109
A4	170821
A5	180912
A6	220217

Our policy is one of continuous improvement and we reserve the right to make changes in design and specifications of any products as engineering advances or necessity requires and revise the above specifications without notice.