

WISER LC100-PP

Wireless Data Sensor



TECAT
PERFORMANCE SYSTEMS



WISER LC100-PP

Wireless Data Sensor

The WISER LC100-PP telemetry system was designed for integration into artificial lift load cell applications. It is capable of achieving an ATEX Zone 0 Intrinsically Safe certification. In addition to the specifications this system also includes the capability to add the following:

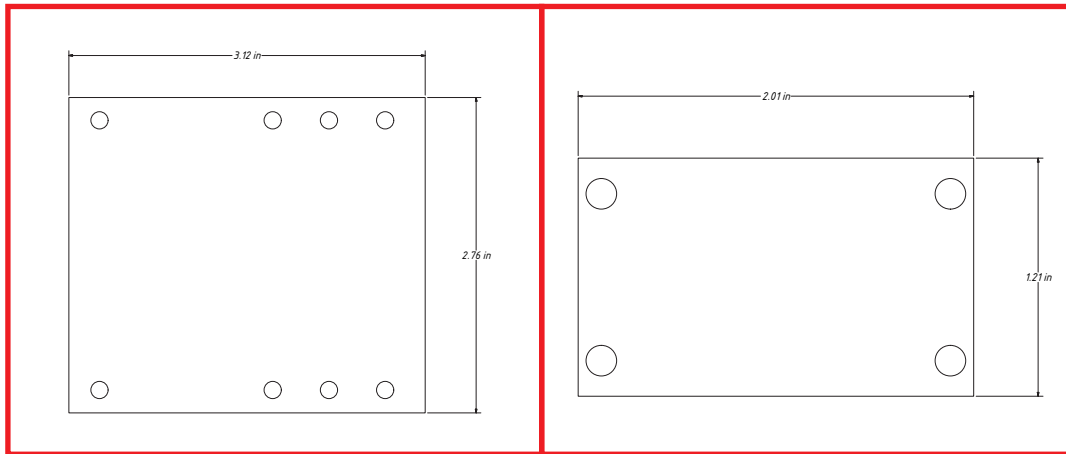
- Second Analog output for voltage or current output
- Digital USB output
- 3 Axis accelerometer
- Ambient temperature
- Battery voltage monitoring
- Over the air (OTA) updating and user configuration
- DC power isolation of the base unit

WISER LC100-PP PRE-PRODUCTION ELECTRONICS SPECIFICATIONS

Pre-Production System Specifications		
Radio Frequency	GHz	2.4
Radio License		World wide license free
Radio Channels (Dial Selectable)		16
Pre-Production Sensor Remote Unit Specifications		
Data Rate ¹	Readings/second	100 continuous
Transmit Power	dBm	13.4
Sensor Excitation	Volts	2.048
Data Resolution	bits	14
Measurement Accuracy	% FS	±0.1
Fault Output	% FS	200
Communication Recovery After Loss Transmission	ms	1
Telemetry Range	meters	1,000
Battery Life ²	months	13
Battery Type		Lithium D cell, 3.6VDC, 19Ah
Sensor Sleep Mode	Sensor enters sleep mode when base unit is power down	
Operating Temperature	0C (0F)	-40 to 80 (-40 to 175)
Storage Temperature	0C (0F)	-55 to 85 (-67 to 185)
Size	in [mm]	Reference drawing in the brochure on page 3
Hazardous Certification	Sensor remote unit	Capable of achieving Intrinsic Safety
Wireless Certification		Capable of achieving FCC, IC, EU/CE



WIRELESS WITH AN EDGE



WISER LC100-PP PRE-PRODUCTION ELECTRONICS SPECIFICATIONS

Pre-Production Base Unit Specifications		
Power	VDC	11.5-25
Supply Current	mA	500
Transmit Power	dBm	20
Nominal Latency	ms	50
Communication Indicator ³	LED	Steady Blue = good communication
		Red Flashes = retries
		Steady Red = battery replacement required
External Excitation, Vexc	VDC	5.000±0.05
Analog Output ⁴	mV/Vexc	2±0.02
Analog Filter	Hz(-3dB)	100
Fault Output	Common Mode VDC	0
Time to Data Available after Power On	Seconds Max	8
Operating Temperature	0C (0F)	-40 to 80 (-40 to 175)
Storage Temperature	0C (0F)	-55 to 85 (-67 to 185)
Low Battery Indicator	LED	Steady red for VBatt<3.1VDC
Mount Type		DIN Rail
Size ⁵	in [mm]	Reference drawing in the brochure on page 3
Additional Specifications for Pre-Production Electronics		
Hazardous Certification	Sensor remote unit	Capable of achieving Intrinsic Safety
Wireless Certification		Capable of achieving FCC, IC, EU/CE

1 Can be remotely controlled from 1Hz to 4kHz.

2 Assume 11Ah battery utilization (continue use in worst case environment), and 100Hz data rate.

3 Battery replacement LED signal at Vbatt 3.1VDC, replace battery within 2 weeks of signal.

4 Typical excitation voltage 5VDC; typical common mode output voltage 2.5VDC

5 Not including DIN rail mount.



TECAT
PERFORMANCE SYSTEMS

775 Technology Drive Suite 200
Ann Arbor, Michigan 48108 USA

Phone: (248)615-9862

tecatperformance.com