

CirrusSense TDWLB-LCC Series Wireless Pressure Transducer with Integrated Cellular Communication



SERIES: TDWLB-LCC

FEATURES

- Industry First Integrated Cellular Communication
- Measures Both Pressure and Temperature
- Remote Monitoring Capability Available
- Pressure Ranges up to 1,000 psi
- Datalogging
- 1% Standard Accuracy
- Reduced Energy Costs
- Optional DC and Solar Powered Versions Available
- Rechargeable LiPo Battery (included with sensor) and Multiple Continuous Power Options for Extended Life
- Alarm Set Points
- Receive Email and/or Text Alerts

SPECIFICATIONS

Performance

Pressure Accuracy	Performance @ 25°C (77 °F)
Overrange Protection	1% BFSL (includes: Non-linearity, Hysteresis and Non-repeatability)
Pressure Range	1.5x Rated Pressure
	See ordering Code, vacuum to 1,000 psi

Environmental Data

Temperature	
Compensated Temperatures	-25°C (-13°F) to 60°C (140°F)
Operating Temperatures	0°C (-32°F) to 45°C (113°F)
Storage Temperatures (without battery)	-30°C (-22°F) to 60° C (140°F)
Storage Temperatures (with battery)	-10°C (14°F) to 25°C (77°F) (less than a year) or -10°C (14°F) to 40°C (104°F) (less than 3 months)
TEB	3% of FS
Temp Probe Temperature Accuracy	± 2° C
Long Term Drift	0.2% FS/year (non-cumulative)
EMI/RFI Protection	Yes
Rating	IP-67

Mechanical Configuration

Pressure Connections	7/16-20 UNF Female w/ 45° flare & valve depressor, 1/4 NPT, 1/8 NPT, G 1/4
Wetted/Sealing Material	Grivory, Viton*, Ceramic

*Schrader Connection uses HNBR. *It is customer's responsibility to determine compatibility.*



SPECIFICATIONS CONT'D

Electrical Data

Power Supply

Rechargeable LiPo battery (included with sensor). Continuous power option required to provide charge to the battery.

Choose from the list of power supply accessories. When in use, should continuous power be temporarily lost, the battery serves as a backup power supply for up to 1 week (depending on the Measurement Interval and Heartbeat settings) to avoid downtime. All units ship with battery at 40%.

Accessories

TDWLB-LCC-BAT-CHARGER: Battery charger, single slot

TDWLB-LCC-SOLAR-PANEL: Solar panel, M8 connector, 13.8"x4.9" Panel Size

TDWLB-LCC-PWR-CABLE: DC Power cable, M8 connector with flying leads, 48" length

TDWLB-LCC-CABLE-SPLITTER: Combination DC power/temperature probe splitter cable, M8 connector, 24" length

TDWLB-LCC-PSUP-Ext-Cable: AC Plug-in power supply, M5 connector, 48" cable length

TDWLB-LCC-M8-TEMP-PROBE-48: Temperature probe, 48" cable length with NTC connector

TDWLB-LCC-SPLITTER-PROBE-POWER REV 3: Splitter cable with power & temperature probe, female right angle M8 connector with temp probe & male straight M8 connector for connecting to solar panel

AC Hose for HVAC Applications (36, 54, 72 inch options): TDWLB-LCC-AUX-AC-HOSE-36,

TDWLB-LCC-AUX-AC-HOSE-54, TDWLB-LCC-AUX-AC-HOSE-72

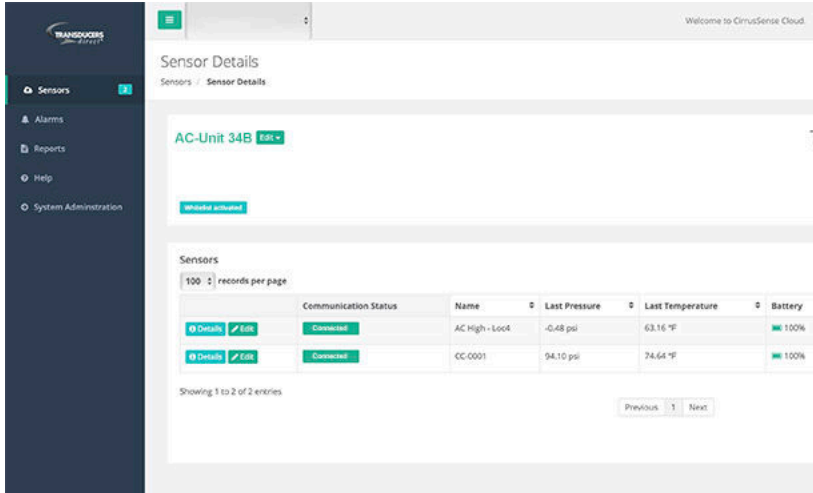
TDWLB-LCC-HOUSING-CLAMP: Sensor mounting clamp for AC units

TDWLB-LCC-BAT2: Spare battery



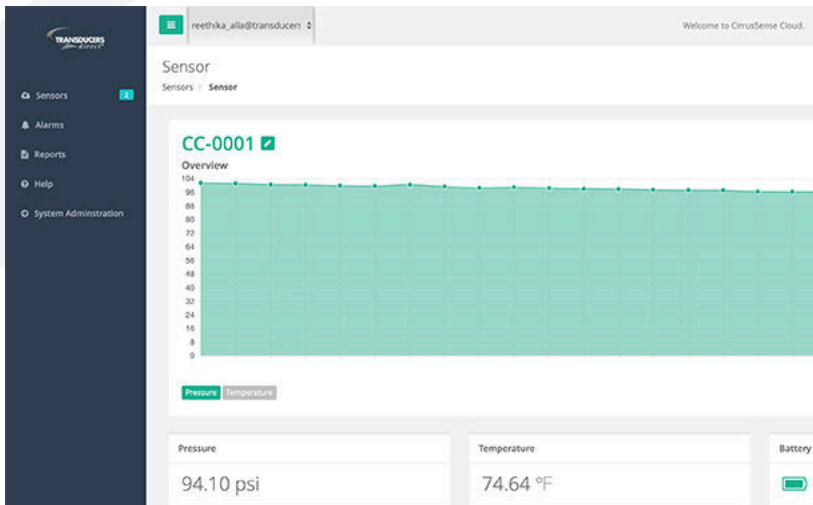
SECURE DATA CLOUD/PORTAL

Portal Screenshot Examples:

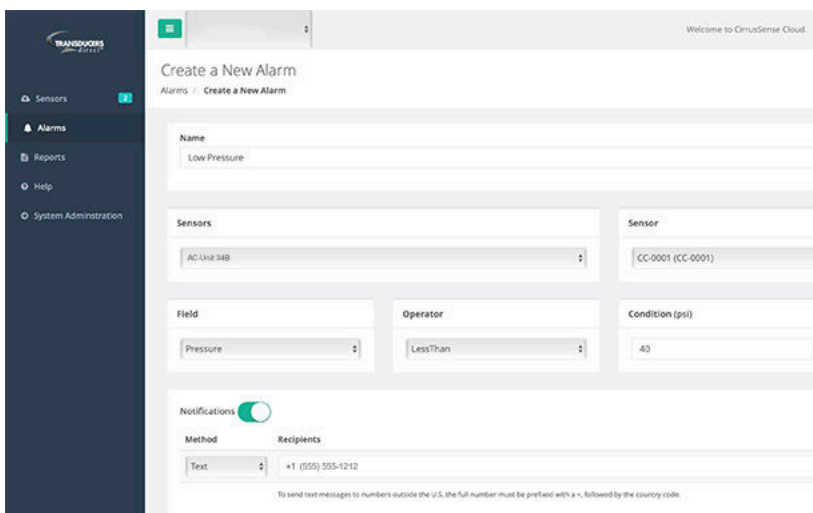


Communication Status	Name	Last Pressure	Last Temperature	Battery
Connected	AC High - Loc4	-0.48 psi	63.16 °F	100%
Connected	CC-001	94.10 psi	74.64 °F	100%

Sensor Details Screen: Summary screen of active cellular sensors. Displays the last pressure and temperature measurements that were reported into the cloud portal.



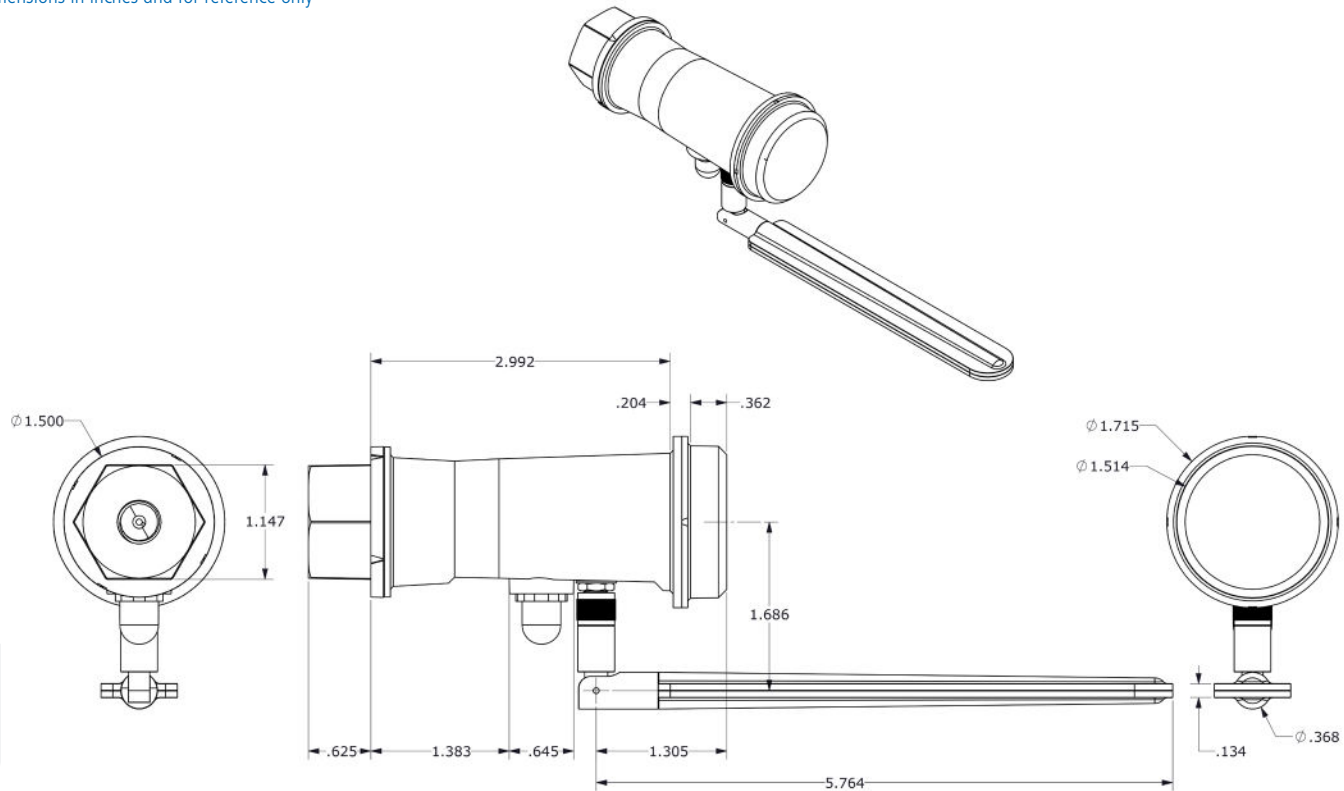
Sensor Screen: Individual sensor details. Displays a graph of the last 25 pressure measurements for the sensor. This screen also displays the last recorded/recent pressure and temperature readings of the sensor along with logs, serial number and a graph of the last 25 pressure readings.



Create a New Alarm: Set up alarms that can be emailed or sent via sms.

DIMENSIONS

Dimensions in inches and for reference only



ORDERING

Series	Pressure Range	Pressure Connection	Accuracy
TDWLB-LCC	0500 (psi)	42	4
	0015	01 = 1/8 NPT	4 = 1.0%
	0025	03 = 1/4 NPT	
	0050	13 = G 1/4	
	0100	42= 7/16-20 UNF Female	
	0250	w/ 45° flare & valve	
	0500	depressor (Schrader)	
	0650	**	
	1000		
	**		

IMPORTANT:

A charging device is needed to charge the battery. Due to shipping regulations, the battery can only be shipped at 40%.

**= Consult factory for further OEM options.

Pressure ranges listed above are quick ship versions.

TDWLB-LCC wireless cellular pressure transducers are capable of measuring vacuum (accuracy is based on the full-scale pressure range of the sensor).

ACCESSORIES

To charge the battery, you must have either a solar panel, AC plug-in power supply, battery charger with USB connector, or a power cable with flying leads.



Solar Panel - directly connects to transducer
Part Number: TDWLB-LCC-SOLAR-PANEL



AC Plug-In Power Supply
Part Number: TDWLB-LCC-PSUP-EXT-CABLE-USA



Battery Charger with USB Connector
Part Number: TDWLB-LCC-BAT-CHARGER



DC Power Cable with Flying Leads
Part Number: TDWLB-LCC-PWR-CABLE



Splitter Cable with Power Leads & Temperature Probe
Part Number: TDWLB-LCC-CABLE-SPLITTER



Temperature Probe - 48 Inch with NTC Connector
Part Number: TDWLB-LCC-M8-TEMP-PROBE-48



Splitter Cable with Power & Temperature Probe
Female Right Angle M8 Connector with Temp Probe and
Male Straight M8 Connector for Connecting to Solar Panel
Part Number: TDWLB-LCC-SPLITTER-PROBE-POWER REV 3

ACCESSORIES

To charge the battery, you must have either a solar panel, AC plug-in power supply, battery charger with USB connector, or a power cable with flying leads.



Sensor Mounting Clamp for AC Unit
Part Number: TDWLB-LCC-HOUSING-CLAMP



Battery
Part Number: TDWLB-LCC-BAT2



AC Hose for HVAC Applications
Part Numbers:
TDWLB-LCC-AUX-AC-HOSE-36 (36 inch)
TDWLB-LCC-AUX-AC-HOSE-54 (54 inch)
TDWLB-LCC-AUX-AC-HOSE-72 (72 inch)

TRANSDUCERS
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