CC PRO wireless load cell





product description

The CC PRO is a next-generation wireless load cell designed specifically for rod pump applications in the oilfield. Engineered around the core principles of Performance, Reliability, and Optimization, the CC PRO delivers exceptional accuracy, dependable wireless operation, and streamlined system efficiency—setting a new standard for rod pump control.

Built for harsh field conditions, the CC PRO combines robust stainless steel construction with integrated load and position sensing, eliminating the need for additional sensors or cables. Its hermetically sealed body ensures reliability in demanding environments, while encrypted wireless transmission and energy-efficient electronics guarantee secure data, strong signal integrity, and extended battery life of 12–18 months.

To further support ease of setup, control, and ongoing maintenance, the CC PRO pairs seamlessly with CC Connect, a free app available for smartphone, tablet, or PC. CC Connect provides real-time insights, wireless performance tuning, and secure firmware updates—maximizing uptime even in remote locations without cellular coverage.

applications

Rod pump control (polished rod load cell)

accessories

Spherical washers, load plates, antenna extension kit

Magnetic mount, post mount for the base unit





RoHS



key features

Capacity 30 or 50klb (13.6 or 22.7t)

UL approved and FCC approved

Range of 100–1,000ft (30–300m)

100 readings per second

Position sensing capability

Battery life of 12 to 18 months

High signal strength & encryption

Environmentally protected to IP67

Fatigue rated to a minimum of 50 million cycles

CC Connect app benefits

Real-time system insights

Wireless performance tuning

Secure diagnostics and updates



specifications

Maximum capacity (E _{max})	lbf	30k or 50k
Excitation voltage	V _{DC}	+5 to +10
Rated load output	mV/V	2.00 ± 0.5%
	mA (optional)	4-20
Nonlinearity	% FS	± 0.25
Hysteresis	% FS	± 0.25
NonRepeatability	% RO	±0.1
Static Error Band	% FS Max	± 0.50
Compensated Temperature Range	°F (°C)	-13° to 149° (-25° to 65°)
Safe Operating Temperature Range	°F (°C)	-70° to 175° (-55° to 80°)
Temperature Effect on Zero	%RO/°F Max	± 0.0075
Temperature Effect on Output	%RO/°F Max	± 0.005
Zero Balance	% RO Max	± 3
Safe, axial load	% Capacity Max	200
Deflection at Capacity	inch nom	0.005
Load cell weight	lb nom	4.5
Fatigue Rating (compression)	Cycles Min @ Capacity	50,000,000
Shock Rating	g	Up to 500g
Vibration Rating	MIL-STD-810G	514.6; 516.6
Sensor construction	-	17-4 PH Stainless Steel
Protection according EN60529	-	IP67 or higher

electronics

Ciccuonics		
Remote & base transceiver units paired	MACID	Unique 32-bit paired address
Data-rate	Readings/sec	100
Radio frequency (Load cell RF)	GHz	2.405 to 2.470
Radio frequency (Wi-Fi)	GHz	2.412 to 2.484
Radio Channels	Selectable (*)	14
Telemetry Range (Line-of-sight)	Feet (Meters) (*)	100 - 1000 (30-300)
RF Power Output- Remote Unit	dBm (*)	15.5dBm (max)
RF Power Output- Base Unit	dBm (*)	17dBm (max)
Battery Life (at 100 sps)	-	12 - 18 months**
Battery Type	Remote Battery	(TL-5930/F) Lithium D Cell, 3.6VDC, 19Ah
Housing Material	-	Grivory GV-5H (Glass reinforced plastic)

^{(*) 2-3}dBm; Telemetry range will change according to site RF Channel Settings

^(**) Battery Life changes as per RF output; latency; Temperature; antenna distances etc. Refer to manufacturer for details.

specifications cont.

base unit

Power Supply	V _{DC} , mA	12 - 24 ; Min. 250mA
External Ref. (Virtual Excitation) Voltage	V_{DC}	4.8-10.1
Virtual Bridge Resistance	Ω	700
Housing Material	-	Die-cast Aluminium

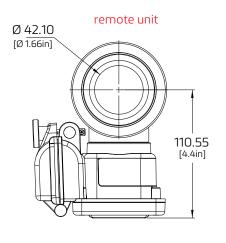
POS output - accelerometer / position pulse

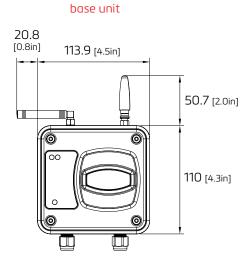
Output type	-	Raw accelerometer or position pulse
Voltage range	V_{DC}	0 to +5
Current (max out)	mA	10

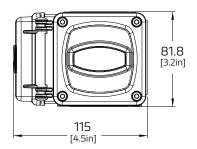
POS SW open-drain output

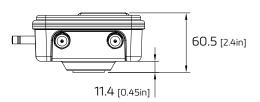
Output type	-	Inverted
Pull-up resistance	Ω	10k (typically)
PU supply range	V _{DC}	+4.5 to +24
Sink current	mA	100

product dimensions (mm)









wiring (base unit)

Wiring connections for base unit as follows. Load cell powered by battery. See user manual for full details.

Caution! Only the remote unit is intended to operate in the hazardous zone.

Power cable

Black	Ground
Yellow	Shield
Red	12 to 24VDC

Signal cable

Red	Vref +
Green	Sig +
White	Sig -
Black	Vref -
Yellow	Shield
Gray	Position +
Violet	Position –

CC Connect app

The CC Connect app extends the performance of the CC PRO by putting real-time control, configuration, and diagnostics in the palm of your hand. Available free of charge from the App Store, Google Play, and the Microsoft Store, the app enables full wireless access to your system—no cell service or wired connection required.

Designed for use on smartphones, tablets, and PCs, CC Connect provides a secure, field-ready interface for setting up, monitoring, and maintaining CC PRO systems.

key features

Real-time visibility of system health and signal strength

Error alerts and summarized diagnostics

Wireless tuning to optimize performance and battery life

Secure firmware updates and diagnostics via encrypted link

Password-protected admin access for settings and configuration









Specifications and dimensions are subject to change without notice.