R.L. Laughlin®
Natural Gas Consultants   Since 1970

BATTERY-POWERED
CELLULAR REMOTE
MONITORING
PACKAGE

R L Laughlin VIACELL-100

Easy-to-install and roll-out ready, battery-powered cellular gateway solution

R L Laughlin ViaCell-100 is a fully integrated, battery-powered cellular gateway with I/O for connecting to a wide range of external sensors.

Designed to work in rugged industrial environments, the ViaCell-100 is the ideal solution for companies looking to add remote monitoring in places where power is not easily available.

Local protocol support allows the ViaCell-100 to communicate with Modbus sensors; the 4 Analog Inputs and Digital Input allow the ViaCell-100 to work with a large variety of sensors.

R L Laughlin SCADA captures data from the R L Laughlin ViaCell-100, providing a web-based dashboard for clients to access all their remote data.

Escalating alarm call-lists can be set up to alert personnel, via SMS, Email, and/or Voice messages, when sensor data has reached alarm threshold levels.

With Daily Reporting, the battery has a lifespan of ~2 years. An optional solar panel accessory is available for extending battery life.

FEATURES

- Weatherproof enclosure
- Alarm Callout / Alarm Notifications via SMS, Email, and / or Voice Messages
- 4 AIN, 4 AOUT, 1 DIN, 1 DOUT
- HART 5, HART 7, Modbus RTU, Modbus ASCII
- Embedded 2G, 3G, LTE
- Class 1 Div 2
- -40 ˚F to 185˚F
- 6 inches x 5 inches x 3 inches
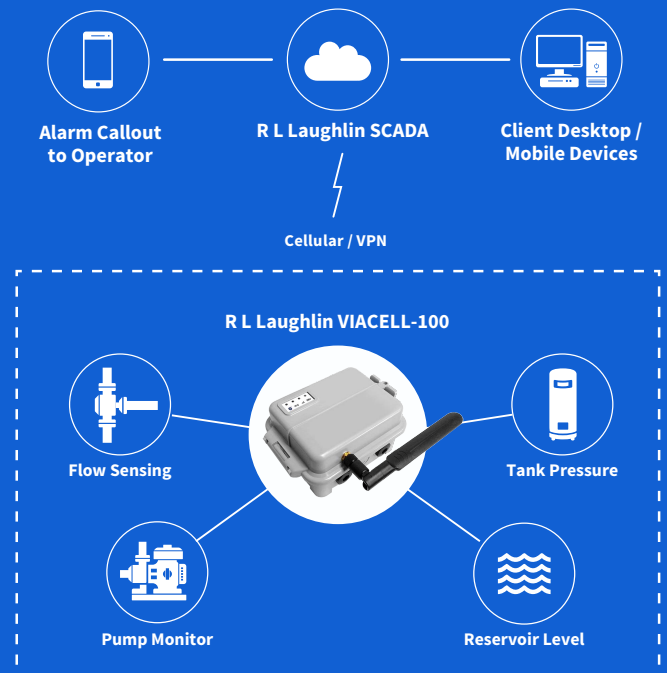- Magnetic Mount
- Solar Panel Accessory Available

APPLICATION EXAMPLE

Alarm Callout to Operator

R L Laughlin SCADA

Client Desktop / Mobile Devices

Cellular / VPN

R L Laughlin VIACELL-100

Flow Sensing

Tank Pressure

Pump Monitor

Reservoir Level

RELATED PRODUCTS

R L Laughlin SCADA

R L Laughlin ViaCell-1000

R L Laughlin ViaSat-10

SPECIFICATIONS	R L Laughlin ViaCell-100
WWAN	
2G BANDS	GSM 850, GSM 900, DCS 1800, PCS 1900
3G BANDS	FDD B1, B2, B4, B5, B8
LTE CATEGORY 1	Verizon: Bands 2, 4, 13 AT&T, T-Mobile: Bands 2, 4, 5, 12 with 3G/2G fallback
ANTENNA CONNECTOR	External SMA
SIM SLOTS	1, Standard size
MANAGEMENT	
CONFIGURATION AND MANAGEMENT	R L Laughlin SCADA
POWER (Does not include power draw of external sensors)	
EXTERNAL POWER INPUT RANGE	8 VDC to 30 VDC
BATTERY AND BATTERY LIFE	7.2 V, 14.5 Ah, Lithium thionyl chloride, non-rechargeable, replaceable; Approximately 2 years (@ 2 reads/transmits per day)
POWER DRAW, SLEEPING	86.4 uW
POWER DRAW, CONTINUOUS MONITOR	400 mW
POWER DRAW, PEAK TRANSMIT	14.4 Watts
SENSOR PROTOCOL SUPPORT	
MODBUS	MODBUS RTU AND ASCII, Connect to up to 4 devices
ANALOG I/O	
INPUTS	4, Configurable as 4/20 mA or 0-10 VDC Analog inputs
INPUT VOLTAGE RANGE	0-10.5 V (Analog input)
INPUT CURRENT RANGE	4-22 mA (Current loop input)
INTERNAL A/D CONVERTER	12 bit
DIGITAL I/O	
PORTS	1 digital I/O or pulse counter input
INPUT RANGE	0-0.6 VCD logic low; 2.2 V-30 VDC logic high
MAX INPUT VOLTAGE	30 VDC
MAX PULSE COUNT FREQUENCY	2 KHZ
DIGITAL OUTPUT	Open collector output, max sink current 450 mA
OUTPUT POWER	
PORTS	5
OUTPUT VOLTAGE OPTIONS	3.3, 5, 15, 24 VDC
MAX CURRENT OUTPUT	200 mA
ENVIRONMENTAL	
OPERATING TEMPERATURES	-31˚F to 158˚F
STORAGE TEMPERATURE	-40˚F to 185˚F
RELATIVE HUMIDITY	90%
BATTERY DISCHARGE	<1% / year if stored at +86˚F
PHYSICAL	
DIMENSIONS (L x W x H)	6 inches x 4.27 inches (5 inches including glands) x 3 inches
WEIGHTS	0.59 lbs
LEDS INDICATORS	Battery, cellular, sensor and Bluetooth
ENCLOSURE	Lexan/IP66
REGULATORY APPROVALS	
SAFETY	UL60950-1, CAN/CSA C22.2 No. 60950-1-01, IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013, EN 60950-1:2006 / A11:2009 / A1:2010 / A12:2011 / A2:2013 and EN 60950-22:2006; Class 1, Division II, groups A,B,C,D; ANSI/ISA 12.12.01:2015,CAN/CSA C22.2 No 213-15, 1st Ed ATEX EN 60079-0:2012+A11:2013, EN 60079-15:2010, eII 3 G Ex nA nC IIC T6 Gc
EMISSIONS	FCC part 15 Subpart B class B, EN55022: 2010/AC: 2011 class B, IECS-003 Issue 5: 2012 class B
IMMUNITY	EN55024:2010
WARRANTY	
PRODUCT WARRANTY	1 year

**FOR MORE INFORMATION
PLEASE VISIT
WWW.RLLCO.COM**