# cellara.io



## Remote data telemetry has never been this easy!



- Cellular or WiFi data communications plus GPS location
- Flexible sensor configurations including MODBUS, RS-232/485, 4-20mA and pulse sensor support
- Extremely low power consumption for long battery life
- Optional internal Li Ion battery with solar charger
- Powerful web-based management software
- Air and Water Quality and other environmental applications

For years, Allyn Technology Group has provided hardware and software solutions for remote data telemetry applications in Asset Tracking, Energy Demand Management, and Environmental Monitoring.

Our Cellara<sup>™</sup> line of Field Application Controllers are field-proven and in use around the globe in the most demanding applications, including pipeline construction, heavy-equipment asset tracking, municipal water treatment, waste management and monitoring and remediation of natural waters.

Cellara's unique capability to span multiple application types comes from the ease in which you can configure it with a broad range of sensor types, including MODBUS®, RS-485, 4-20 mA and Pulse, as well as support for RS-232 serial sensors. Programmable sensor types, sensor reading frequencies, call-in schedules and alarm parameters allow detailed monitoring of remote



View Cellara™ sensor data in graph or chart form by channel and date

field conditions from your web-enabled device. SMS and Email notifications provide immediate notification when something is out-of-bounds. For even tighter integration to your enterprise applications, full software APIs are available for most software architectures.

### cellara.io FEATURES

**Wireless Operation** - Enables installation at sites that do not have power and phone lines available or when bringing those facilities to the data collection point would be costprohibitive.

**Device Power Management** - Turn on sensors only when needed; Turn off when not needed to conserve power and extend unattended operations. Use Cellara's intelligent power modes and battery charging circuits for extremely low power consumption and long battery life.



**Web-Based Portal Access** - Manage modem and sensor configurations, such as data collection frequency, reporting and alarm limits, over the web. Login to the cellara.io web portal and start using the system as soon as your devices are turned on. View data online from your desktop or mobile device. Download data for advanced off-line analysis.

**MODBUS® Compatible** - Works with popular MODBUS- enabled sensors, including Instrumentation Northwest (INW) CT2X, PT2X and TempHion water quality sensors.

**Multi-Use Platform** - Use the same web platform for environmental data monitoring and field asset and personnel tracking. Choose Cellara<sup>™</sup> device configurations that meet your needs, and view all the data on one web platform.

**Integrate Easily with REST or SOAP APIs** - Software developer application programming interfaces (APIs) are available through RESTful web services or Simple Object Access Protocols (SOAP) to allow full device integration with your in-house enterprise systems.

### FLEXIBLE & SECURE

Cellara's web-based application allows you to manage who has access to view and manage your devices and their data. Both the web application and our powerful software API's use SSL encryption to protect data from unwanted eyes. Cellular traffic is encrypted over direct-to-carrier Virtual Private Networks (VPNs), and all accesses are logged for audit traceability.

### CONTACT US TODAY

Learn more about our complete line of field-ready application solutions. Contact us and speak with our experienced team about your specific needs at (360) 850-1090, or <u>sales@allyntech.com</u>.

#### **CELLARA™ P3 FIELD APPLICATION CONTROLLER**

Cell Modem	
CDMA	Dual-band CDMA 800 / 1900 MHz
GSM	Quad-band EGSM 850 / 900 / 1800 / 1900 MHz
LTE Cat-M1	Available Q2 2018

Features	
Serial communications	3 RS-232 serial ports. RS-485 Modbus
4-20	Two independent channels Measurement Range: 0-24mA Input resistance: Approx. 60 ohms Current Limit: Approx. 40 mA per channel 16-bit reading 2- or 3-wire capable Switched loop power with programmable warmup time
Pulse	Two independent inputs Accommodates a wide range of inputs include 0-5V, 0-10V, sine-wave and open collector Accommodates external input voltages up to 24VDC Pulse frequencies from 0Hz to 2KHz Programmable pulse constant Provides rate and volume totalization
Protocol support	MODBUS RTU, Various custom drivers
Storage	4 Mbytes on-board, available in the event of loss of cell/server access. Store-and-forward operation
Power	
Primary power	12 – 24 VDC primary and Solar panel inputs
Battery	Optional internal Li Ion battery
Charging	Optional solar battery charge capability
Standby current	150 μΑ
Typical battery life	When equipped with 1500 mAh 11.1V Li-Ion battery (no external power) before recharge is required:

3 months with 1x per nour check-in (sensor depender	3 months with	1 1x per hour	check-in (	sensor de	penden
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CELLARA™ ON-BOARD GPS				
Frequency range	L1, 1575.42 MHz			
Acquisition Sensitivity – MSA Asynchronous A-GPS	-158 dBm			
Cold Start Sensitivity	-145 dBm			
Tracking Sensitivity, standalone or MSB	-160 dBm			
Accuracy in open sky	< 2 meters CEP-50 (open sky, 1Hz tracking)			
Standalone TTFF (time to first fix)	1 second (super hot) 29 seconds (warm) 35 seconds (cold)			
Total number of SV	-30 SVs			
Supports predicted orbits	Yes			
Predicted orbit accuracy	5 meters (1 – 2 day ephemeral age)			
Enclosure rating	IP 54			
	*controller only, batteries, antennas, and installation hardware not included in dimensions			