

CORNELL PUMP COMPANY

# CO-PILOT™

INDUSTRIAL INTERNET OF THINGS PUMP MONITOR



CORNELL  
**Co-Pilot™**



# CO-PILOT™ SPECIFICATIONS



Connect via Cell



5 Sensor Inputs



Remote Start Up



## CORNELL Co-Pilot™

### THE POWER OF IOT

Cornell Co-Pilot is a monitoring system that connects to your pump to track temperature, vibration, and location using battery power. Co-Pilot can also be powered with a wired connection for continuous monitoring and control system integration. Co-Pilot is part of our Pumps Industrial Internet of Things (IIoT) and reflects our dedication to cutting-edge design and meeting customer needs.

### USE THE CO-PILOT TO:

- Plan maintenance
- Check operation
- Reduce manual inspections
- Track pump location
- Demonstrate run conditions to customers on warranty claims
- Improve run time through the maintenance program
- Monitoring at your fingertips

### MONITORING AT YOUR FINGER TIPS

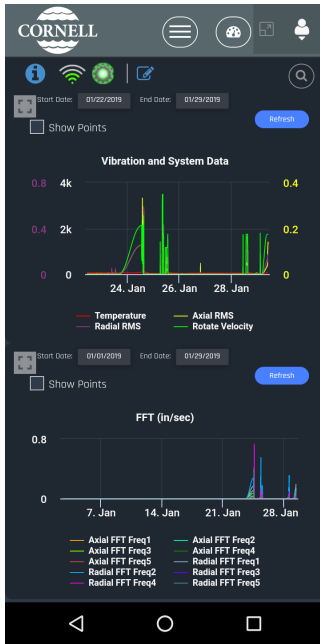
Easily monitor your pump's performance with desktop and mobile apps available for iOS and Android. Receive alarms for out-of-condition operations and view the last GPS location of the pump, all in one convenient platform.

### CORNELL CO-PILOT ALLOWS YOU TO:

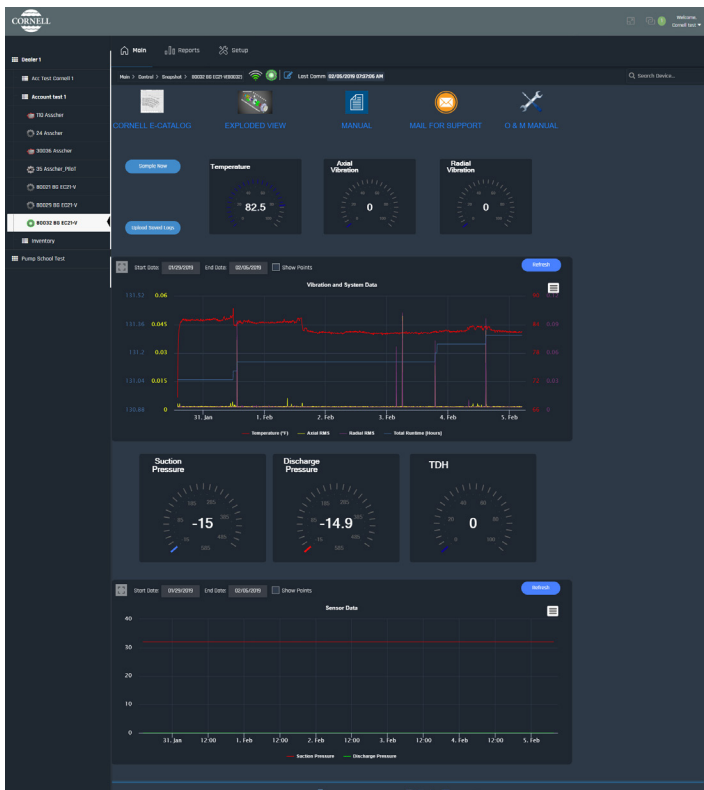
- Cloud monitor single and multiple pumps via IIoT
- With battery power, monitor temperature, vibration, and GPS location
- Through external power, additionally monitor pressure, flow, start/stop operations, and more\*
- Track data over time via web-based and mobile apps
- Real-time pump data for maintenance, monitoring performance degradation, and critical conditions
- Receive alerts for preset running conditions
- \*Requires external sensors; contact Cornell for details.

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# CO-PILOT™ SPECIFICATIONS



Screenshots from the mobile Co-Pilot app.



Co-Pilot desktop version screenshot.

Get started at  
[CO-PILOT.CORNELLPUMP.COM](http://CO-PILOT.CORNELLPUMP.COM)

## TECHNICAL SPECIFICATIONS

### COMMUNICATION

- 4G LTE cellular cloud connectivity
- Monitor all connected pumps from a single app
- GPS Location Information
- Usable in North America currently with planned updates for Europe, Middle East, Asia, Sub-Saharan Africa & Australia

### ON -BOARD MONITORING

- 3-axis vibration monitoring [Inch/Sec]
- Temperature  $\pm 5^{\circ}\text{F}$  /  $\pm 2.7^{\circ}\text{C}$
- Battery voltage [V]
- Up to 5 additional inputs to connect external sensors

### NOTIFICATIONS

- Vibration threshold cross (Axial/Radial RMS)
- Vibration velocity amplitude threshold cross in any of the FFT-selected frequencies
- Operational time threshold cross
- Temperature threshold cross
- Other thresholds set for additional sensors (contact Cornell for information on connecting additional sensors)

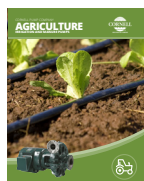
### DIMENSIONS/ OPERATIONS/STANDARDS

- 3.4" x 3.4" x 1.9" (86mm x 86mm X 48mm)
- Robust insulated enclosure
- IP65 compliant (dust tight and protected against water from a nozzle)
- FCC Part 15 and RoHS compliant
- Temperatures from  $-22^{\circ}\text{F}$  /  $-30^{\circ}\text{C}$  to  $158^{\circ}\text{F}$  /  $70^{\circ}\text{C}$

### POWER

- External DC power: 12-24 VDC; up to 20 samples/ hour and 8 cloud updates per day
- Back-up Battery operable. Three AAA Lithium batteries provide power when external power is not installed or is temporarily unavailable. This offers three months of service at four samples per hour and two daily cloud uploads. Batteries are replaceable.

# CORNELL PUMP COMPANY MARKET & PRODUCT LINE



AGRICULTURE



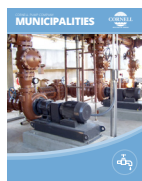
FOOD PROCESS



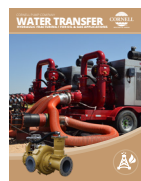
INDUSTRIAL



MINING



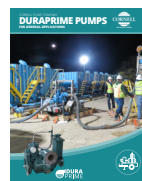
MUNICIPAL



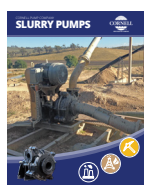
WATER  
TRANSFER



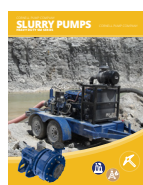
REFRIGERATION



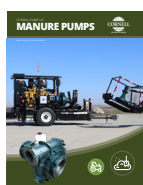
CONSTRUCTION



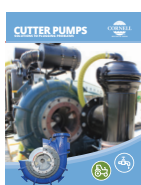
SLURRY



SLURRY SM



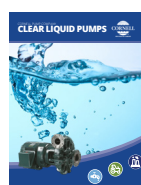
MANURE



CUTTERS



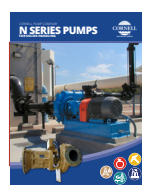
SELF PRIMING



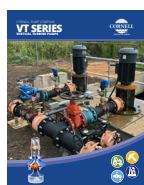
CLEAR LIQUIDS



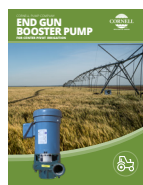
MX SERIES



N SERIES



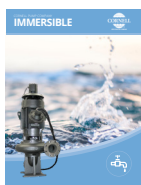
CYCLONE™



EDGE™



HYDRAULIC  
SUBS



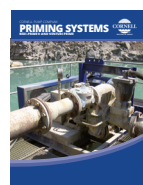
IMMERSIBLE



CD4MCU



RUN-DRY™



PRIMING  
SYSTEMS



CYCLOSEAL®

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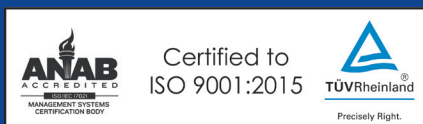
Cornell pumps and products are the subject of one or more of the following U.S.  
and foreign patents:

6,074,554; 6,036,434; 6,079,958; 6,309,169; 6,104,949.

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Cornell Pump Company  
Clackamas, Oregon, USA  
P: +1 (503) 653-0330  
F: +1 (503) 653-0338