MOBILTEX

CorTalk® RMU1

REMOTE MONITORING FOR TEST STATIONS AND COUPONS

CorTalk
a MOBILTEX brand

TRUSTED REMOTE MONITORING

A true hidden talent. Designed to fit entirely inside a standard CP test station, the RMU1 is a small, powerful tool for remote monitoring of CP single or double coupons and structure bond applications.

The RMU1 collects and transmits CP performance data and GPS location as frequently as every few hours via satellite or cellular network. This provides technicians with a highly detailed, near-real-time view of the CP system and helps identify short-lived events that may impact CP performance.

When combined with the Mobiltex CorView web analytics platform, pipeline operators can implement a network of RMU1 devices to gain deep insight into the performance of the CP system, generate reports and instantly identify areas of concern.

THE COMPACT SIZE OF THE RMU1 ALLOWS EASY INSTALLATION TYPICALLY IN UNDER 20 MINUTES

RMU1 Generation 4 is also capable of two-way communication and can provide remote, GPS-synchronized interruption with the addition of Mobiltex INT1, a compact accessory module.

ADVANTAGES OF CORTALK RMU1

- Fast, simple installation; typically under 20 minutes
- Configurable as a CP coupon or critical bond remote monitor
- Multiple analog measurement channels provide accurate measurements for all required AC and DC parameters
- A user-replaceable battery provides up to 10 years of monitoring, data transmission and helps maximize lightning isolation
- Satellite or cellular transmission with cost-effective communication plans
- Intuitive configuration using any web-enabled device
- Generation 4 hardware platform allows connection of additional external accessory modules

RMU1 SPECIFICATIONS

ENVIRONMENTAL:

Operating Temperature	-40° to +60° C (-40° to +140° F)
Storage Temperature	-45° to +80° C (-49° to +176° F)
Maximum Altitude	5000 meters above sea level
Humidity	0 to 100% RH non-condensing

POWER | COMMUNICATIONS | DATA:

Battery Life	Typically 10 years — readings every 7 days Typically 5 years — readings every 12 hours and 2 weeks of interruption per year [+INT1]
Internal Battery Measurement	OK, Warning and Low conditions displayed on CorView
Communications	Globalstar Simplex Satellite (RMU1S) Iridium SBD Satellite (RMU1I) Cellular UMTS B2,5 and LTE B2,4,5,12,13 (RMU1G) Cellular LTE Cat M1/NBIoT B2,4,5,12,13 (RMU1G-LTEM)
GPS Receiver	72-channel u-blox M8

PHYSICAL:

Weight	225 grams (0.5 lbs)
Size	80mm x 80mm x 110mm (3.15"x3.15"x4.33")
Enclosure	UV stable, wide temperature polycarbonate

Authorized Reseller

PERFORMANCE:

Pollution Degree	1
External Analog Channels	2 potential, 1 bond shunt, 1 coupon current
Measurement Type	Category 1 (as per CSA C22.2 – 61010)
Analog Ranges (DC & AC True RMS)	Potential: +/-31VDC, 22VAC Current: +/-6mADC, 4.25mAAC Low Range +/-60mADC, 42.5mAAC Med Range +/-200mADC, 140mAAC High Range Bond Shunt: +/-6mVDC, 4.25mVAC Low Range +/-60mVDC, 42.5mVAC Med Range +/-200mVDC, 140mVAC High Range
AC Rejection on DC Readings	>65dB @ 50/60Hz
Lightning Immunity	Survives multiple 30KV surges
Isolated Digital Input	+/-100VDC maximum <-3VDC or >3VDC for activation (bi-directional sense) Optically isolated (2500V_{RMS})
DC Measurement Accuracy (over operational temperature)	Potential: +/-1% + 1mV Current: +/-0.75% + 10uA Low Range +/-0.5% + 15uA Med Range +/-0.5% + 35uA High Range Bond Shunt: +/-0.75% + 2uV Low Range +/-0.5% + 5uV Med Range +/-0.5% + 15uV High Range
AC Measurement Accuracy (over operational temperature)	Potential: +/-1.25% + 5mV, 20mV floor Current: +/-1% + 5uA, 5uA floor Low Range +/-1% + 15uA, 50uA floor Med Range +/-1% + 50uA, 150uA floor High Range Bond Shunt: +/-1.1% + 25 uV, 5uV floor Low Range +/-1.1% + 35 uV, 50uV floor Med Range +/-1.1% + 75uV, 150uV floor High Range
Coupon Current Shunt	1 ohm
Input Impedance	>20 Mohm (potential) 130 Kohm (bond current shunt)
ADC Resolution	16 bits
Temp. Measurement Accuracy	+/-4° C (+/-7° F) over -40° to +60° C (-40° to +140° F)

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CLOUD PLATFORM

MOBILTEX CORVIEW:

POWERFUL VISUALIZATION AND CONTROL — IN ONE PLATFORM

CorView delivers powerful, secure two-way communication capabilities, data storage and reporting for the entire range of MOBILTEX CorTalk remote monitoring devices.

- **INTUITIVE INTERFACE DESIGNED FOR EASE-OF-USE**
  The CorView platform is designed for simplicity. Its thoughtfully engineered UI enables key personnel to quickly and easily access the data repository, reporting functions and remote RMU controls with virtually no training.
- **ACCESS ANYWHERE, WITH ANY WEB-ENABLED DEVICE**
  All data that is transmitted from the RMU devices is stored in the secure MOBILTEX multi-tenant global database and can be accessed from any location, providing users instant, comprehensive access to all performance data and activities.
- **CREATE DETAILED REPORTS, GRAPHS AND MAPS**
  Technicians and managers can easily view and download measurement data, create trending graphs and generate reports. CorView also displays easy-to-read maps that provide near real-time display of system status so technicians can see where CorTalk devices are operating normally, performing interruption activities or experiencing alarm conditions.
- **REMOTELY CONTROL AND UPDATE IN-FIELD DEVICES**
  CorView's robust cellular or satellite communication capabilities enable two-way communication with most RMU devices to remotely modify device configurations and to apply software updates and eliminate the need for time-consuming manual system updates.
- **NO I.T. OVERHEAD**
  The CorView web-based platform is entirely supported by MOBILTEX with automatic updates and enhancements - no updates ever required! AWS [Amazon Web Services] delivers enterprise grade security, scalablity, and performance.

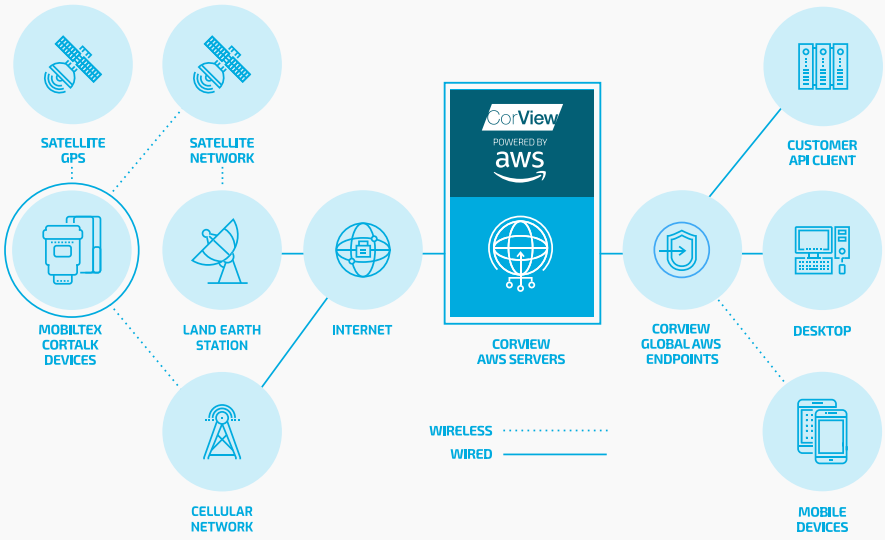
AICPA SOC
aicpa.org/soc4so
SOC for Service Organizations | Service Organizations

CLOUD ACCESS

1 **DATA ACQUISITION, SECURITY & CONTROL**

2 **VISUALIZATION & ANALYSIS**

3 **REPORTING, ALARMS & COLLABORATION**



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ABOUT MOBILTEX®

At MOBILTEX, technology is just the beginning. We've been leading the industry in cathodic protection monitoring for corrosion prevention on over three hundred thousand of miles of pipelines throughout North America and around the world. That's why pipeline and corrosion engineers across all industries have come to rely on us.

With our innovative engineering, design and manufacturing, we've created dependable IIoT technology that's built smart, built tough, and built to last. Our success comes from thinking like our customers and we always engineer to effectively solve your unique challenges. We're proud to say we've proven our technology in the harshest, most challenging of environments — time and time again.

But it doesn't stop there, every one of our solutions is backed by our industry leading customer service and support team that's ready to take you from product selection, to the initial set-up, through to our ongoing support.

THIS IS MOBILTEX. WE'RE THERE.

35+ YEARS
OF MONITORING INNOVATION

300K MILES
OF PIPELINE MONITORED

~200
MAJOR ORGANIZATIONS ASSETS PROTECTED

ONEOK · KINDER MORGAN · BHE TRANSMISSION · national gas · Williams · ExxonMobil · bp · ENBRIDGE · MARATHON · Shell · TC Energy

READY TO SPEAK TO ONE OF OUR PRODUCT SPECIALISTS?

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