MOBILTEX

CorTalk® RMU1-ER

TEST STATION REMOTE MONITORING OF ELECTRICAL RESISTANCE PROBES

CorTalk
a MOBILTEX brand

REMOTELY CAPTURE CHANGING CORROSION CONDITIONS IN NEAR REAL-TIME

The CorTalk RMU1-ER collects and transmits a measurement of the corrosion rate near the pipe surface through the use of sacrificial electrical resistance (ER) probes as frequently as every few hours via satellite or cellular network.

This provides technicians with highly detailed, near real-time measurement data that is useful in determining the underlying cause of corrosion and the ability to measure changes in corrosion conditions including the effectiveness of repairs, temperature cycles or sudden environmental changes.

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

The RMU1-ER is designed to be compatible with a wide range of ER probes. The RMU1-ER has the capability to measure ER probes constructed with tubular, wire, cylindrical, flush, spiral and strip geometries.

In addition to metal loss, the RMU1-ER can also measure the ER probe potential when a reference cell is connected. As the ER probe is typically electrically connected to the protected structure, the structure potential can be measured.

Combined with the **CorView Cloud Platform**, pipeline operators can implement and control a network of RMU1-ER devices to gain deep insight into the performance of the CP system, generate reports and instantly identify areas of concern.

ADVANTAGES OF CORTALK RMU1-ER

- Fast, simple installation; typically under 20 minutes
- ER data identifies events causing corrosion vis metal loss, corrosion rate and trends
- Measure ER probe potential with reference cell and electrical connection to protected structure to also measure structure potential
- 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-ER 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 based on readings every 7 days
Internal Battery Measurement	OK, Warning and Low conditions displayed on corView
Communications	Iridium SBD Satellite (RMU1ER-I) Cellular UMTS B2,5 and LTE B2,4,5,12,13 (RMU1ER-G)
GPS Receiver	72-channel u-blox M8
Datalogger Storage (Factory Enabled Option)	1 million reading points

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
AC Rejection on DC Readings	>65dB @ 50/60Hz
Lightning Immunity	Survives multiple 20KV 10mS surges
DC Measurement Accuracy (over operational temperature)	Potential: +/-1% + 1mV
AC Measurement Accuracy (over operational temperature)	Potential: +/-1% + 5mV, 20mV floor
ER Probe Measurement Accuracy	+/-1% of useable probe life
Input Impedance	>20 Mohm (potential)
ADC Resolution	16 bits
Temp. Measurement Accuracy	+/-4° C (+/-7° F) over -40° to +60° C (-40° to +140° F)

PHYSICAL:

Weight	225 grams (0.5 lbs)
Size	80mm x 80mm x 110mm (3.15"x3.15"x4.33")
Enclosure	Enclosure

Authorized Reseller

READY TO SPEAK TO ONE OF OUR PRODUCT SPECIALISTS?

CALL TOLL-FREE IN US OR CANADA:
1.844.689.3282 | (844.MTX.DATA)

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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.

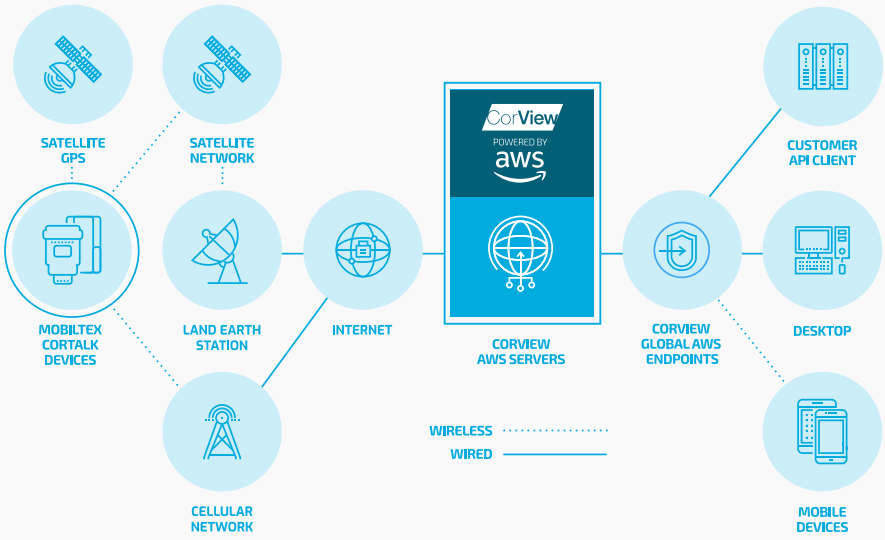
AICPA SOC
aicpa.org/soc4so
SOC for Service Organizations | Service Organizations

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

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