MOBILTEX

CorTalk® RMU1+TS1

PIPELINE INTEGRITY TEMPERATURE SENSOR REMOTE MONITORING AT TEST STATIONS

CorTalk® RMU3+TS1

PIPELINE INTEGRITY TEMPERATURE SENSOR REMOTE MONITORING AT RECTIFIERS

CorTalk



RMU1 FOR PIPELINE INTEGRITY SENSING:

OUR PROVEN REMOTE MONITORING PLATFORM IS NOW AVAILABLE TO CAPTURE PIPELINE TEMPERATURE

Intelligently designed to fit entirely inside a standard test station, the RMU1 is a small yet powerful tool engineered to provide remote monitoring of pipeline assets in any location requiring complete autonomy.

This specially redesigned CorTalk RMU1 collects and transmits field sensor data and GPS location as frequently as every few hours via satellite or cellular network from virtually any location. This provides pipeline integrity engineers with near real-time readings that can capture information on short-lived events as well as long-term trends that can help identify impacts on the operational life of a pipeline.

- Fast, simple installation; completely discrete design
- User-replaceable battery; up to 10 years of field autonomy
- Engineered to maximize lightning immunity
- Satellite or cellular transmission, connect from any location
- Intuitive configuration using any web-enabled device



CORTALK RMU1

CorTalk

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

RMU3 FOR PIPELINE INTEGRITY SENSING:

BRING REMOTE PIPELINE TEMPERATURE SENSING TO POWERED LOCATIONS OR RETRO-FIT EXISTING INSTALLATIONS

The RMU3 is a two-piece monitoring system installed within rectifier cabinets that is renowned for it's small size, durability and intelligent engineering.

The robust CorTalk RMU3 system is designed to withstand the toughest conditions and provide years of maintenance-free service. Two-way information provides pipeline integrity engineers with near real-time measurements via the CorView cloud-based platform.



CORTALK RMU3

CorTalk

- Add up to 12 temperature sensors to a single RMU3
- Fast, simple installation; completely discrete design
- Superior lightning and surge protection
- Fast, simple configuration via PC, iOS or Android app

THE RMU3 CAN TRANSMIT MEASUREMENT DATA VIA CELLULAR OR SATELLITE NETWORKS FROM ANY LOCATION TO THE CORVIEW PLATFORM

TS1 CONFIGURATIONS:

COMPLETE RTD SENSOR/TRANSMITTER PACKAGE WITH REMOTE POWER FOR UP TO 10 YEARS OF FIELD AUTONOMY

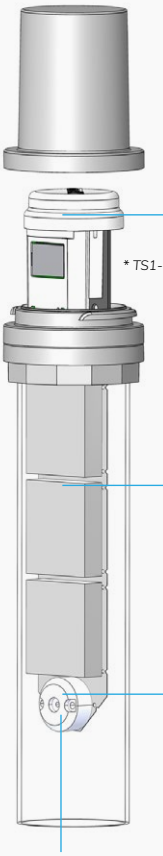
Robust, reliable, and cost-effective temperature monitoring of pipeline assets is now available from MOBILTEX, engineered for performance in even the most extreme and remote locations.

The MOBILTEX TS1 configurations enable field technicians to select from battery or line-power to permanently install remote, GPS-enabled temperature sensing capabilities that are compatible with our CorTalk RMU1 or RMU3 platforms, with the RMU3 able to connect up to 12 temperature sensors. Measurement data is accessible 24/7 within our CorView cloud-based interface to enhance pipeline integrity data collection and help ensure the fitness of the pipeline in locations that have historically been cost-prohibitive to monitor.

Accurate temperature monitoring on multi-product lines requires wide temperature ranges, depending on the product and the season. The TS1 RTD transmitter connects to any standard Pt100 resistance sensor, is fully configurable, and provides high stability over an extremely wide range making it ideal for any field application.

The MOBILTEX TS1 enables pipeline engineers to easily and cost effectively monitor for extreme temperature fluctuation to identify risks of accelerated pipe coating deterioration and identify potential geohazard events where soil and moisture conditions shifts have occurred affecting normal temperature, which may have also damaged the pipeline. The TS1 also will allow users to monitor for pipeline temperature variances to enable more accurate calculation of volumetric flow for leak detection system calibration.





CONNECT TO ANY STANDARD PT100 RESISTANCE SENSOR

- **PIPELINE TEMPERATURE**
  Inserted into conduit abutting the pipeline or applied directly to pipe as shown
- **SOIL TEMPERATURE**
  Placed in soil surrounding the pipeline

SPECIFICATIONS

RMU1

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

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

COMMS / DATA:

Communications	- Satellite: Iridium SBD
	- Cellular: LTE B2,4,5,12,13
GPS Receiver	72-channel u-blox M8
Datalogger Storage (Factory Enabled Option)	1 million reading points

POWER:

Battery Life	Typically 10 years based on readings every 7 days
Internal Battery Measurement	OK, Warning and Low conditions displayed on CorView
Lightning Immunity	Survives multiple 20KV 10mS surges

RMU3

ENVIRONMENTAL:

Operating Temperature	-40° to +70° C (-40° to +158° 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

PHYSICAL:

Weight	200 grams (7 oz)
Size	135mm x 38mm x 38mm (5.3” x 1.5” x 1.5”)
Enclosure	UV stable, wide temperature polycarbonate
Mounting	Mounted inside rectifier - antenna on exterior

COMMS:

Communications	- Satellite: Iridium SBD
	- Cellular: LTE B2, 4, 5, 12, 13
GPS Receiver	- Internal 72 channel

POWER:

PWR IN Operating voltage range	9-18 VAC 50/60Hz, 9-22 VDC
	25 VA maximum
Power Source	LPS or Class 2 CSA/UL approved (CSA 60950-1 or UL 60650-1)
Lightning Immunity	Survives multiple 20KV 10mS surges

RTD TRANSMITTER

ENVIRONMENTAL:

Operating Temperature	-40 to 85°C (-40 to 185°F)
Storage Temperature	-50 to 90°C (-58 to 194°F)
Humidity	10 to 90% RH non condensing

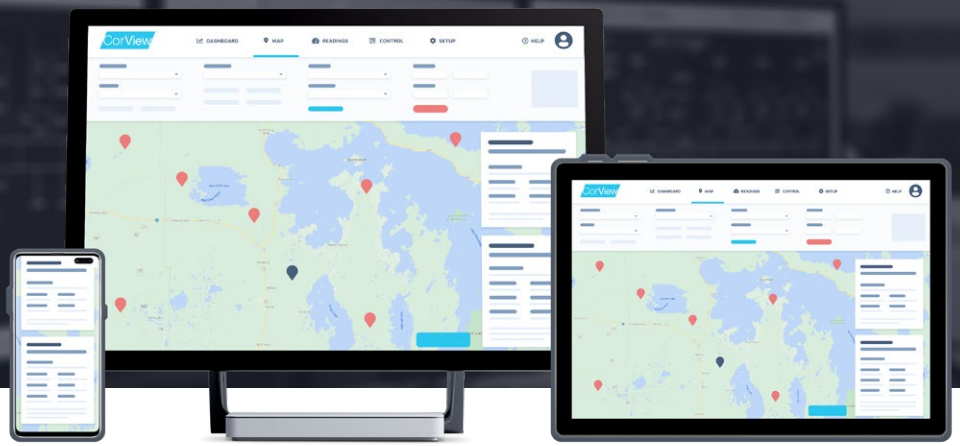
POWER AND INPUT:

Battery Life	Typically 10 years : readings every 7 days
Sensor Type	Pt100 100 Ω @ 0°C 2 or 3 Wire
Sensor Range	-200 to 850°C (-328 to 1562°F)
Sensor Connection	Screw terminal
Minimum Span	25°C (77°F)
Measurement Accuracy	0.1°C ±0.05% of reading
Thermal Drift	25 ppm/°C
Excitation Current	<200 uA
Lead Resistance Effect	0.002°C/Ω
Maximum Lead Resistance	20 Ω per leg

MOBILTEX

CorView

CORVIEW 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.

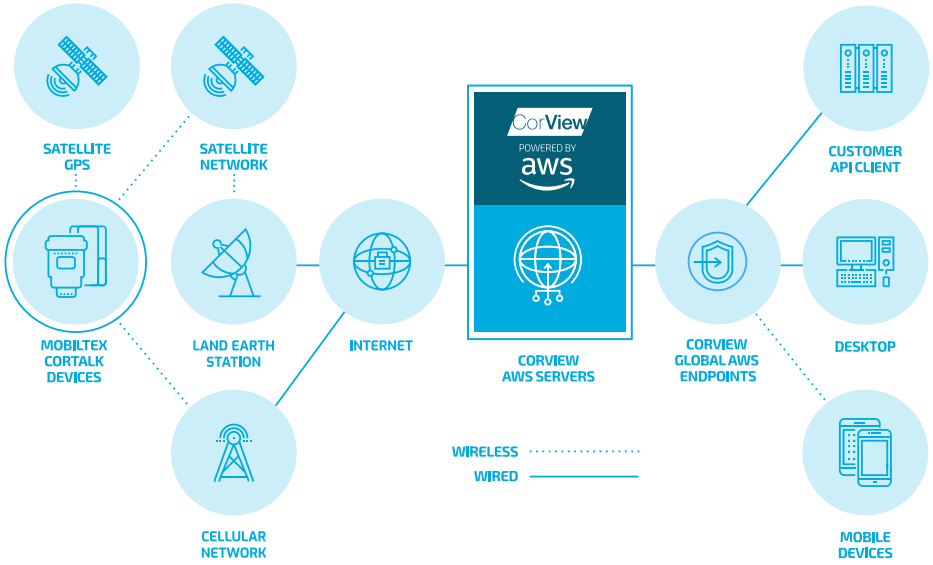
- **INTUITIVE INTERFACE DESIGNED FOR EASE-OF-USE**
  The CorView platform is designed for simplicity. Its thoughtfully engineered UI enables key personnel to quickly and easily access the data repository, reporting functions and remote RMU controls with virtually no training.
- **ACCESS ANYWHERE, WITH ANY WEB-ENABLED DEVICE**
  All data that is transmitted from the RMU devices is stored in the secure MOBILTEX 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 platform is entirely hosted and supported by MOBILTEX, all updates and enhancements to the platform are automatic and ongoing.

CLOUD ACCESS

1 **DATA ACQUISITION & CONTROL**

2 **VISUALIZATION & ANALYSIS**

3 **REPORTING, ALARMS & COLLABORATION**



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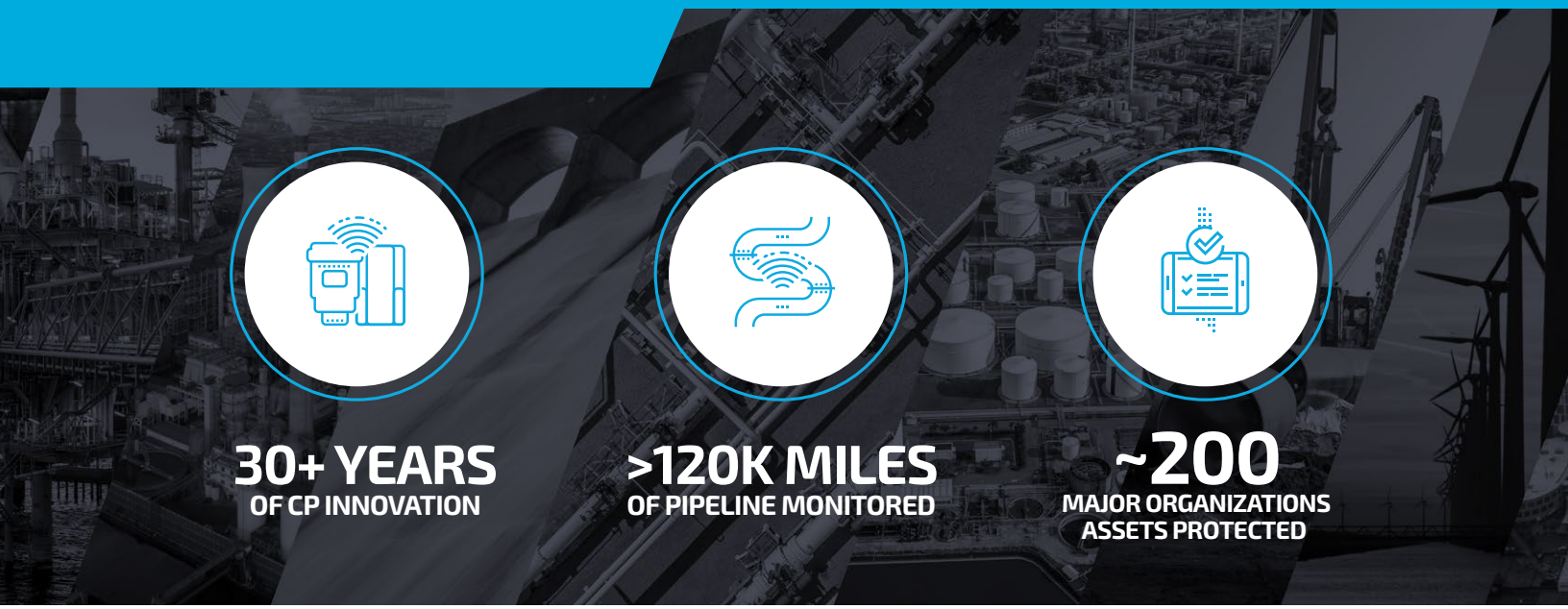
ABOUT MOBILTEX®

At MOBILTEX, technology is just the beginning. We've been leading the industry in cathodic protection monitoring for corrosion prevention on over one 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.*



30+ YEARS
OF CP INNOVATION

>120K MILES
OF PIPELINE MONITORED

~200
MAJOR ORGANIZATIONS
ASSETS PROTECTED

MAGELLAN MIDSTREAM PARTNERS, L.P. · KINDER MORGAN · Dominion Energy · PHILLIPS 66 · Williams · Chevron · bp · ENBRIDGE · MARATHON · Shell · TC Energy



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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