

CorTalk® RDL1

FAST SAMPLING REMOTE DATA LOGGER WITH FULL RMU1 FUNCTIONALITY + AVAILABLE GPS SYNC'D INTERRUPTION

CorTalk
MOBILTEX brand



SOLVE YOUR TOUGHEST TRANSIENT CURRENT DIAGNOSIS CHALLENGES WITH AN ENHANCED FAST SAMPLE DATALOGGER + ALL RMU1 FUNCTIONS

The RDL1 represents a convergence of two classes of technology that have long been cornerstones of the CP industry – stationary dataloggers and remote monitoring units. In a significant evolutionary step, the RDL1 is the industry's most powerful and versatile battery powered remote monitoring device with enhanced fast sample datalogging capabilities.

Combining the best elements of both technology classes, the RDL1 allows operators to gain visibility into the performance and state of their protection systems while capturing high volumes of data directly to the CorView Cloud Platform via CAT-M1 [LTE-M 4G/5G] cellular connections that are granular enough for forensic and diagnostic analysis. A versatile tool, the RDL1 can be used in a wide range of applications; from identifying dynamic AC and DC interference from a light rail transit system, to being used for datalogging Telluric impacts during a survey, to monitoring a constant potential rectifier.

In addition, the RDL1 pairs with the CorTalk INT1 to provide GPS synchronized interruption for critical bonds and sacrificial anodes, eliminating the need for technicians to install portable interrupters. Simply put, the CorTalk RDL1 represents a new generation of remote monitoring capabilities that will dramatically improve how CP systems are operated.

ADVANTAGES OF CORTALK RDL1

- Dual Data File Structure — Individual RMU Readings + Fast Sample Recording which promotes efficiency for battery life and data plan structure
- Fast Sample Functionality — Scheduled or Event-based, from 10S sampling to 0.1S sampling (limited to 3hr max per day)
- Long-life battery and device autonomy — Delivers up to 10 years of monitoring and data transmission while maximizing lightning isolation
- Multiple pre-defined configurations and expandable — ready for single coupon, dual coupon, separate AC and DC coupons, and bond [reverse current switches] monitoring applications; INT1 compatible for GPS synchronized interruption, includes 4-20mA Mode
- Smart, simple installation with easy configurations — compact, weather-proof design fits inside a standard CP test station [external antennas optional], installed in about 20 minutes; intuitive configuration via iOS/Android mobile device with available Bluetooth
- Robust Design — Lightning, surge and overvoltage protection and broad operating temperature range (-40° to +60°C [-40° to +140°F])

CORTALK RDL1 APPLICATIONS:

- AC Interference & Mitigation Monitoring
- HVAC/HVDC Fault Monitoring
- Test Station Monitoring w/ Telluric and Dynamic Current
- Depolarization Surveys
- Dynamic DC Interference at LRT Crossings
- Monitoring for Baseline During Surveys (ie. Tellurics)

RDL1 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, 2 weeks of interruption per year [+INT1]
External Power	Options Available - only Mobiltex external power accessories can be used
Internal Battery Measurement	OK, Warning and Low conditions displayed on CorView
Communications	Cellular LTE Cat M1/NBLoT B2,4,5,12,13 (RMU1G) Cellular LTE Cat M1/NBLoT B2,4,5,12,13 (RDL1G-LTEM)
GPS Receiver	72-channel u-blox M8
Datalogger Storage	8 million reading points

PHYSICAL:

Weight	550 grams (1.2 lbs)
Size	220mm x 75mm x 50mm (8.66"x2.95"x1.97")
Enclosure	UV stable, wide temperature polycarbonate

PERFORMANCE:

Pollution Degree	1
External Analog Channels	2 potential, 1 bond shunt, 2 coupon current
Measurement Type	Category 1 (as per CSA C22.2 – 61010)
Analog Ranges (DC & AC True RMS)	Potential: +/-75VDC, 50VAC Current: +/-12mADC, 8.50mAAC Low Range +/-120mADC, 85.0mAAC Med Range +/-400mADC, 280mAAC High Range Bond Shunt: +/-12mADC, 8.50mAAC Low Range +/-120mADC, 85.0mAAC Med Range +/-400mADC, 280mAAC High Range >65dB @ 50/60Hz Survives multiple 30KV surges 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 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
AC Rejection on DC Readings	
Lightning Immunity	
DC Measurement Accuracy (over operational temperature)	
AC Measurement Accuracy (over operational temperature)	
Coupon Current Shunt	1 ohm
Input Impedance	>40 Mohm (potential) 100 Kohm (bond current shunt)
ADC Resolution	24 bits
Temp. Measurement Accuracy	+/-4° C (+/-7° F) over -40° to +60° C (-40° to +140° F)



READY TO SPEAK TO ONE OF OUR PRODUCT SPECIALISTS?

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1.844.689.3282 | (844.MTX.DATA)

INT1 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 | DATA STORAGE:

Temp. Measurement	+/-4° C (+/-7° F) over -40° to +60° C
Accuracy	(-40° to +140° F)
Battery Life	Typically 5 years based on readings every 12 hours and 2 weeks of interruption per year

PHYSICAL:

Weight	300 grams (0.7 lbs)
Size	80mm x 28mm x 172mm (3.15"x1.10"x6.80")
Enclosure	UV stable, wide temperature polycarbonate

PERFORMANCE:

Pollution Degree	1
External Analog Channels	2 potential, 1 bond current
Measurement Type	Category 1 (as per CSA C22.2 – 61010)
Analog Ranges (DC & AC True RMS)	Potential: +/-31VDC, 22VAC Bond Current: +/-300mADC, 210mAAC Low Range +/-3ADC, 2.1AAC Med Range +/-10ADC, 7AAC High Range >65dB @ 50/60Hz
AC Rejection on DC Readings	Survives multiple 30KV surges
Lightning Immunity	Potential: +/-1% + 1mV
DC Measurement Accuracy (over operational temperature)	Bond Current: +/-0.75% + 10uA Low Range +/-0.5% + 15uA Med Range +/-0.5% + 35uA High Range Potential: +/-1.25% + 5mV, 20mV floor
AC Measurement Accuracy (over operational temperature)	Bond Current: +/-1% + 5uA, 5uA floor Low Range +/-1% + 15uA, 50uA floor Med Range +/-1% + 50uA, 150uA floor High Range
Bond Current Shunt	0.02 ohm
Input Impedance	>20 Mohm (potential) 130 Kohm (bond current shunt)
ADC Resolution	16 bits



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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**

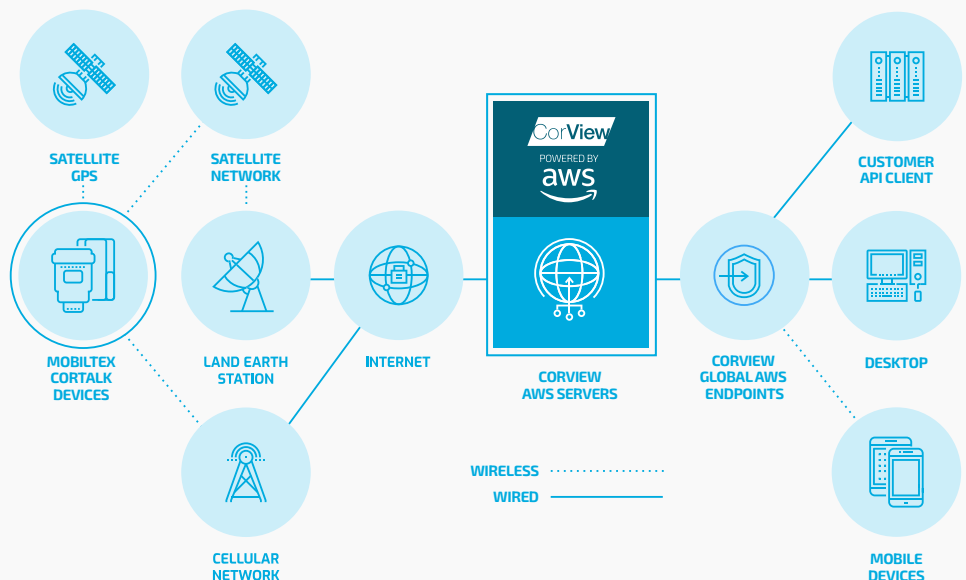
The CorView platform is entirely hosted and supported by MOBILTEX, all updates and enhancements to the platform are automatic and ongoing.

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 almost two hundred thousand 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 for the future. 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 initial set-up, through to our ongoing support. Our team has built a reputation that is unmatched in our industry and we are committed to our customers success.

THIS IS MOBILTEX. WE'RE THERE.



35+ YEARS
OF MONITORING
INNOVATION



>160K MILES
OF PIPELINE
MONITORED



~200
MAJOR ORGANIZATIONS
ASSETS PROTECTED

MAGELLAN
MIDDLEBURY PARTNERS, L.P.

KINDER MORGAN

Dominion
Energy

PHILLIPS
66

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ENBRIDGE

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Shell

TC Energy

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