

SENTINEL PLUS

PRODUCT DESCRIPTION

Our compact and accurate Cathodic Protection remote monitoring Sentinel series are designed to be used in any type of CP application. It may fit inside several types of test posts including steel test posts and by using GSM connection, all type of CP regular measurement data could be collected remotely. Measurement interval and parameters are easily set via internet on our in-house built server interface.

- Rugged and durable with aluminium enclosure
- Easy to fit inside 4" steel test post
- Android™ application to first start up and data control on site
- AC/DC Voltage and AC/DC Current Measurements from pipe, coupon and anode
- Long battery life without any replacement (up to 5 years by weekly data collection.)



AREAS OF USE

- Regular Cathodic Protection Potential Survey
- Pipe Polarized Potential Survey
- Polarization Tests
- AC / DC Interference Tests
- Coupon Tests
- Current Requirement Tests

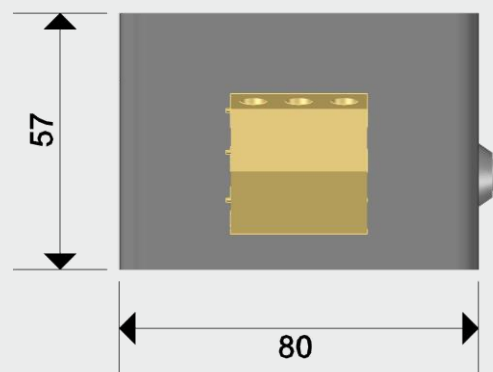
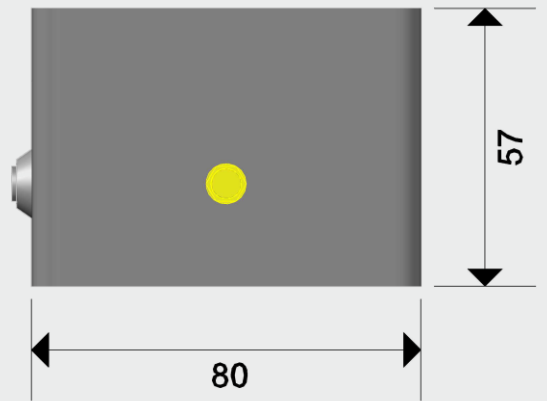
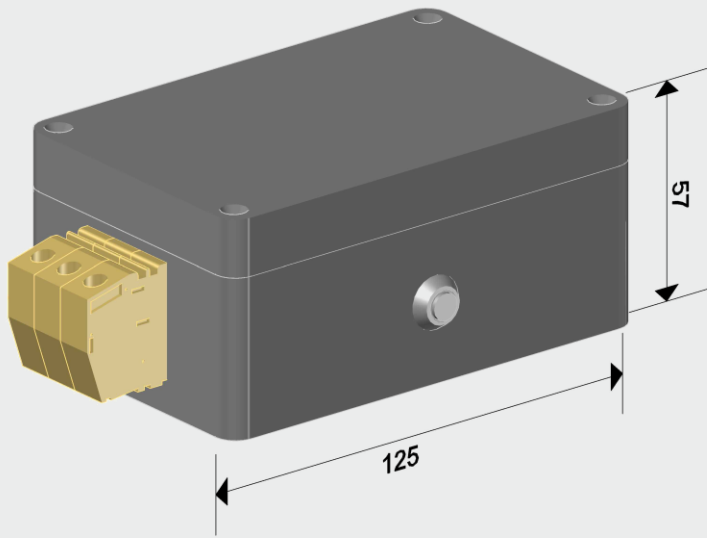
FEATURES

- DC / AC Voltmeter / Ammeter
 - o Measurement Waveform : DC & AC
 - o Voltage Measuring Range : ± 8 Volts DC, AC (RMS)
 - o Current Measuring Range: ± 100 mA DC, AC
 - o Voltage Resolution : 1 mV DC/AC
 - o Current Resolution: 0.1mA DC/AC
 - o Accuracy : + / - %1
 - o High Voltage Protection
 - o 50Hz AC Filter
- Remote Data Transfer via GSM
 - o Device locations on web based interface
 - o Data collection settings including data interval, parameters and alarms
- Android™ Application via Bluetooth
 - o Supports Android™ 4.4 to Android™ 9
 - o Real Time Voltage Measurements and Graphs
 - o Remote Monitoring Settings
- Physical Properties
 - o Dimensions – 125x80x57mm excluding terminals

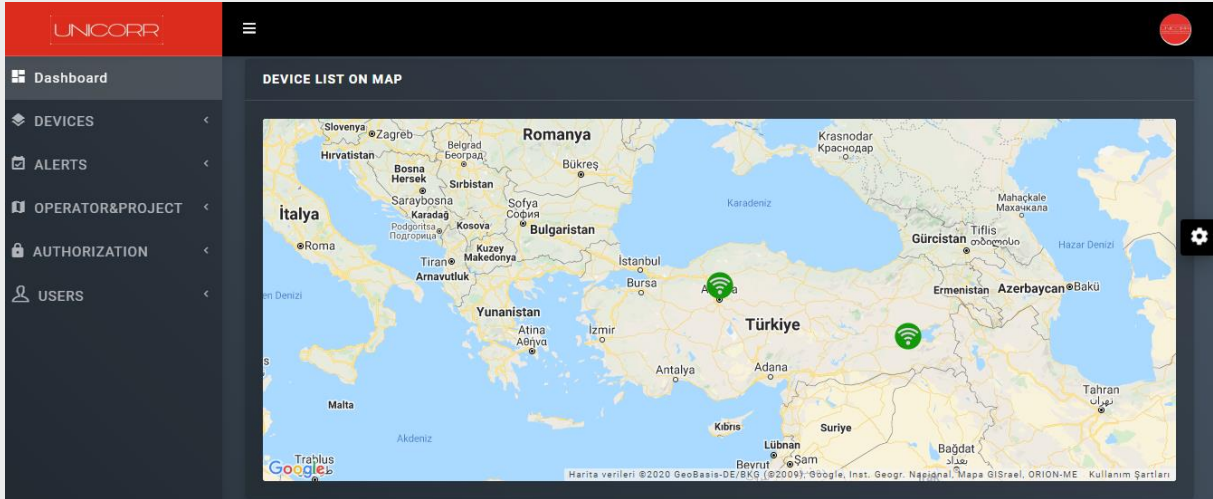
SENTINEL PLUS – Technical Specifications

Description	Value	Description	Value
Channel1		Channel2	
Type	Current	Type	Voltage
Range	± 100mA	Range	± 8V
Resolution	0.1mA	Resolution	1mV
Accuracy	±1% + 0.1mA (1Digit)	Accuracy	±1 % + 1mV (1Digit)
Protection Type	Fuse	Protection Type	MOV+PTC+VDD Clamping
Input Impedance	< 0.1 ohms	Input Impedance	~ 10Meg ohms
Storage		GSM	
Type	SD Card	2G	Yes
Size	8GB Standar up to 64GB	3G	Optional
WiFi		4.5G	Optional
Frequency	2412-2484 Meg Hz	Antenna Type	Standart SMA Antenna
TX Power	13 dBm	Measurements	
Sensitivity	-74 dBm	DC On Potential (mVDC)	
Antenna Type	Internal Antenna	DC Instant Off Potential (mVDC)	
Battery		AC Potential (mVAC)	
Capacity	19000mAh	DC Coupon Current (mADC)	
Standby Life	10 Years	AC Coupon Current (mAAC)	
1 Hour Interval	~4.500 Data Sent Life: 186 Days	DC Coupon Potential (mVDC)	
2 Hour Interval	~4.350 Data Sent Life: 363 Days	AC Coupon Potential (mVAC)	
4 Hour Interval	~4.150 Data Sent Life: 693 Days	Galvanic Anode Potential (mVDC)	
24 Hour Interval	~2.900 Data Sent Life: 2900 Days	Galvanic Anode to Pipe Current (mADC)	

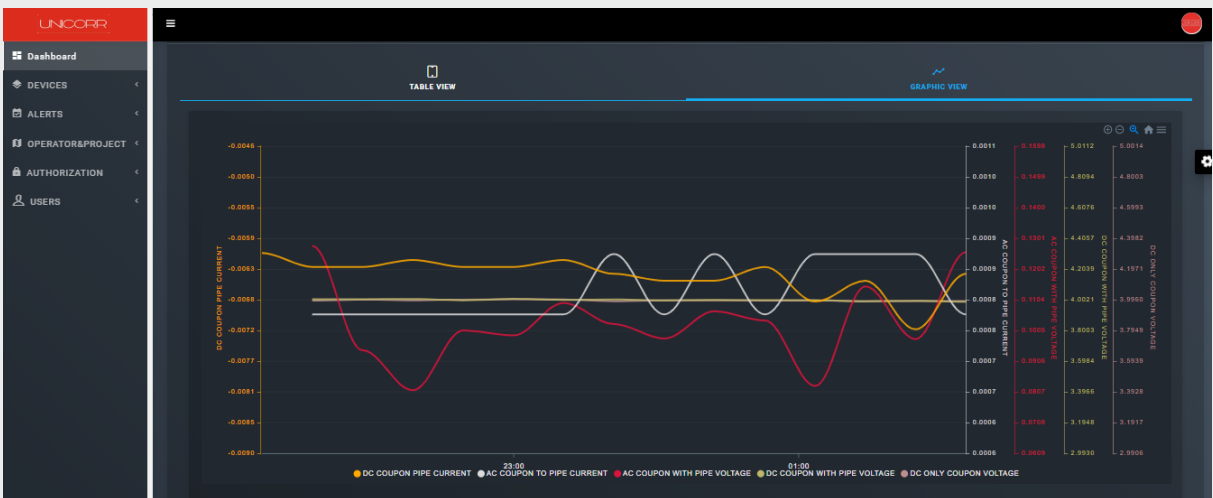
SENTINEL PLUS - Dimensions



SENTINEL PLUS – Web Server User Interface



DATE	DC COUPON PIPE CURRENT (A)	AC COUPON TO PIPE CURRENT (A)	AC COUPON WITH PIPE VOLTAGE (V)	DC COUPON WITH PIPE VOLTAGE (V)	DC ONLY COUPON VOLTAGE (V)
2020-03-15 00:35:39	-0.0064	0.0008	0.1258	3.9906	3.9891
2020-03-15 00:25:03	-0.0072	0.0009	0.0977	3.9963	3.9894
2020-03-15 00:14:29	-0.0065	0.0009	0.1147	3.9936	3.9875
2020-03-15 00:03:54	-0.0068	0.0009	0.0826	4.0002	3.9924
2020-03-14 23:53:19	-0.0063	0.0008	0.1037	4.0009	3.9919
2020-03-14 23:42:43	-0.0065	0.0009	0.1067	4.0018	3.9936



SENTINEL PLUS – Web Server User Interface

Device List
Dashboard / Device Management

[ADD NEW DEVICE](#)

Device Filters

DEVICE NAME: OPERATOR: PROJECT: STATUS:

DEVICE TYPE NAME: INFORMATION:

[FILTER](#)

Device List

SHOW ENTRIES SEARCH:

DEVICE NAME	DEVICE TYPE NAME	LATITUDE	LONGITUDE	IP ADDRESS	STATUS	OPERATOR	PROJECT	ACTION
Unicorr-SP-200002	Sentinel Plus	38	42	127.0.0.1	Active	KORTEK ARGE	ARGE	MANAGEMENT

Device Management
Dashboard / Device Management / Device Management

Device Details

Device Name : Unicorr-SP-200002
Device Type Name : Sentinel Plus
Operator : KORTEK ARGE
Project : ARGE
Latitude : 38 / Longitude : 42
IP Address : 127.0.0.1
Last Communication Time : -
Device Unique ID : yW9zaaC2WFXmmIGZtc6D
Status : Active

Informations

Battery Capacity = 19000 (STRING)

Recent Parameters

PARAMETER NAME	VALUE
Battery Voltage (V)	0
DC COUPON PIPE CURRENT (A)	0
AC COUPON TO PIPE CURRENT (A)	0
AC COUPON WITH PIPE VOLTAGE (V)	0
DC COUPON WITH PIPE VOLTAGE (V)	0
DC ONLY COUPON VOLTAGE (V)	0
AC ONLY COUPON VOLTAGE (V)	0

Edit Device Type
Dashboard / Device Types / Edit Device Type

Device Type Edit Form

DEVICE TYPE NAME:

[UPDATE](#)

Information List

Name	Type	Action
Battery Capacity	String	EDIT

[+ ADD NEW INFORMATION](#)

Configuration List

Name	Typ
GSM SERVER CONNECTION INTERVAL	Int

[+ ADD NEW CONFIGURATION](#)

Parameter List

Name	Type
AC COUPON TO PIPE CURRENT	Double
AC COUPON WITH PIPE VOLTAGE	Double
AC ONLY COUPON VOLTAGE	Double
Battery Voltage	Double