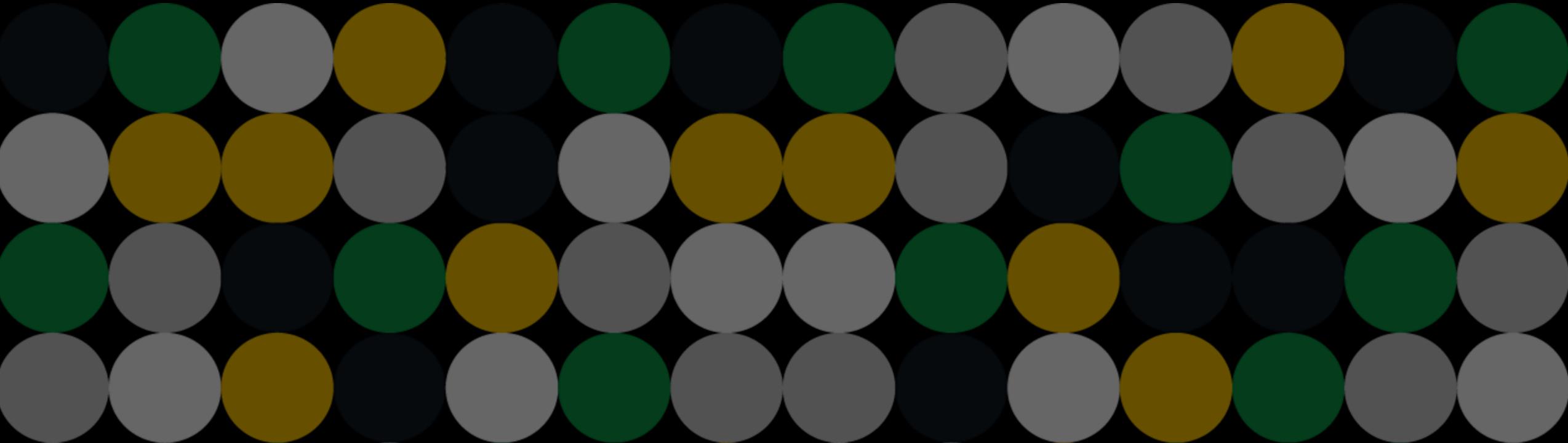


ENERTECT[®]

Battery Monitoring . UPS Monitoring . Power Monitoring



MONITORING WITH CONFIDENCE.

HQ in Singapore
15 Locations
worldwide

In-house
development &
service team

avoid rejection of
warranty claims

comply with IEEE
1188
maintenance
practices

generate
performance
reports

comply with
warranty guidelines
of major battery
manufacturers

evaluate voltage &
temperature
trends

Enertect Monitoring Systems allow you to maintain a safe and secure system with real-time monitoring which will minimize the probability of any failures and optimize the service life of your assets.

ENERTECT ▲ 2020



ENERTECT ▲ 2015

CELLTRAK ▲ 2009

ENERTECTMAX
User Experience Demo >>>



BATTERY MONITORING SYSTEMS (BMS)

What are your **PAIN POINTS** ?



thermal runaway



unforeseen costs



safety compromise



premature battery aging



installation integrity



improper maintenance



travel restrictions



offshore/remote location



Hazardous site location



sensitive site entry



Unable to use conventional maintenance methods

“monitor, correct, detect and prevent failures before they occur”



KEEP TRACK OF EVERYTHING THAT IS IMPORTANT.

An innovative battery monitoring system for large scale technology installations where power and system availability are critical for successful business operations. It is a powerful tool for mitigating and preventing costly downtime due to unexpected system failure.



Voltage



Internal Resistance



Battery
Temperature



Capacity



Charge/Discharge
Cycles



Ripple Voltage



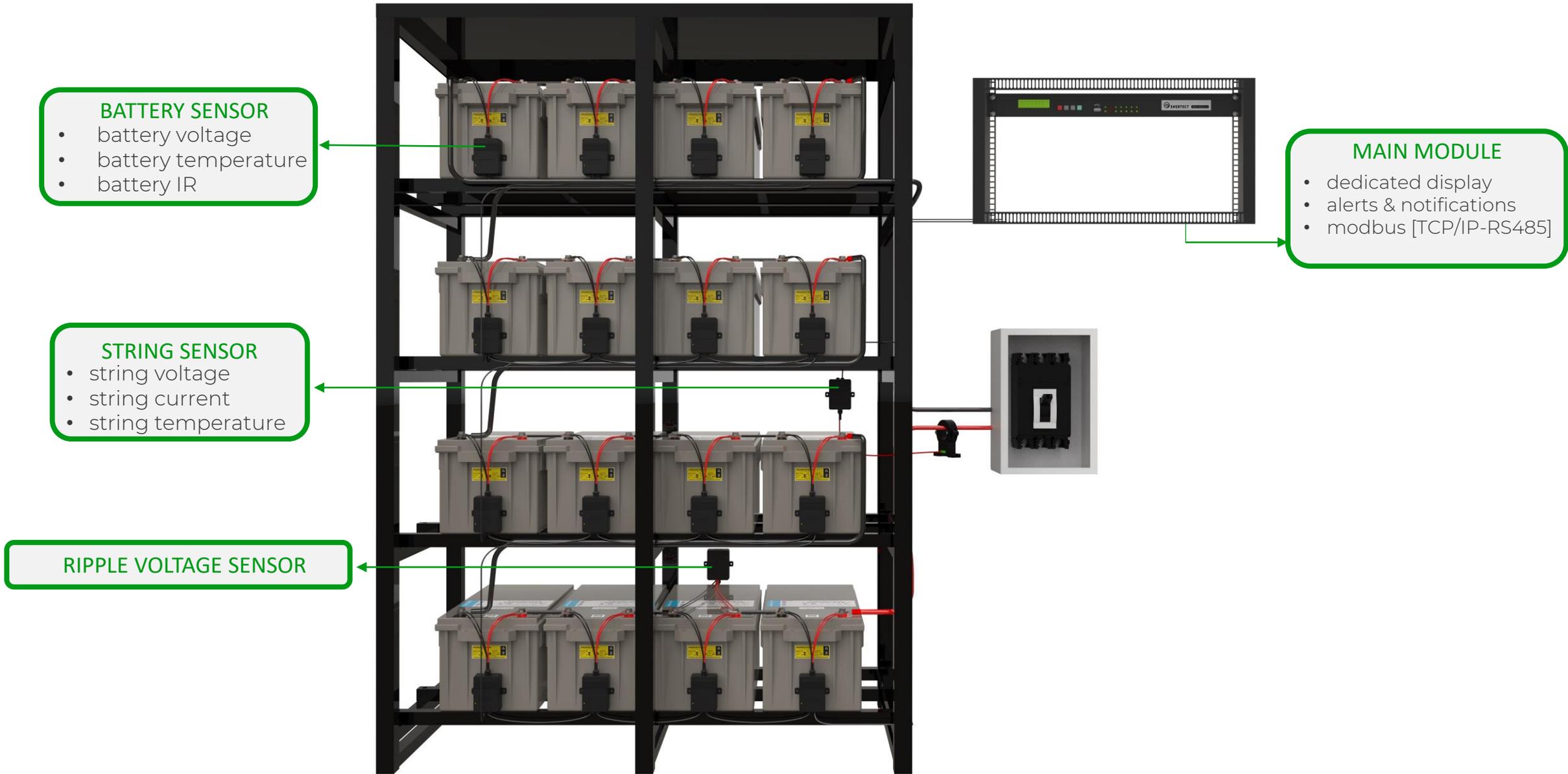
Current



Ambient
Temperature



Hydrogen
Gas Detector



ENERTECT^{MAX}

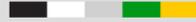


Connect



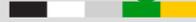
TCP / IP
RS485

Communicate



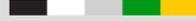
MODBUS
SNMP

Integrate



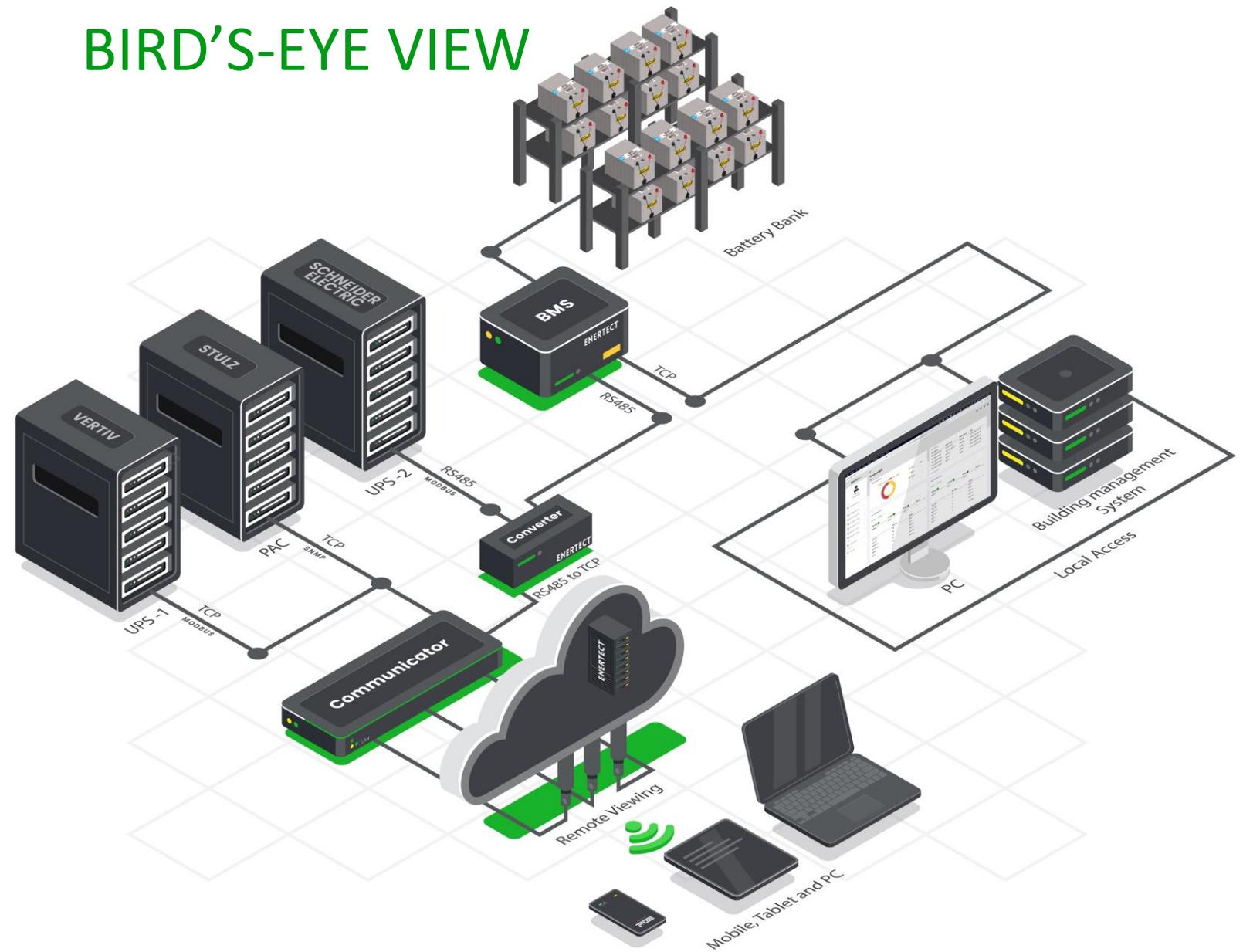
Building Management Systems
SCADA Systems
UPS Systems
Third Party Systems

Alerts & reports



Mobile / SMS notification
Email Notification
Periodic Performance Reports

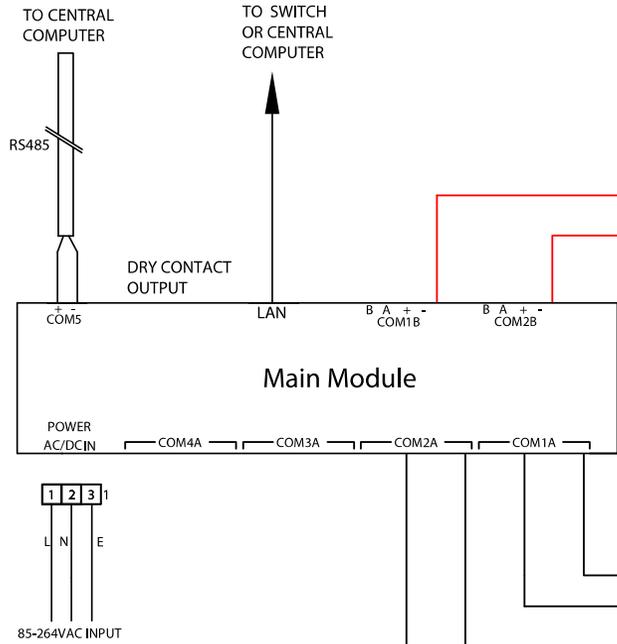
BIRD'S-EYE VIEW





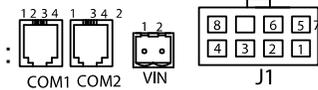
SCHEMATIC DIAGRAM

48 blocks x 2 strings

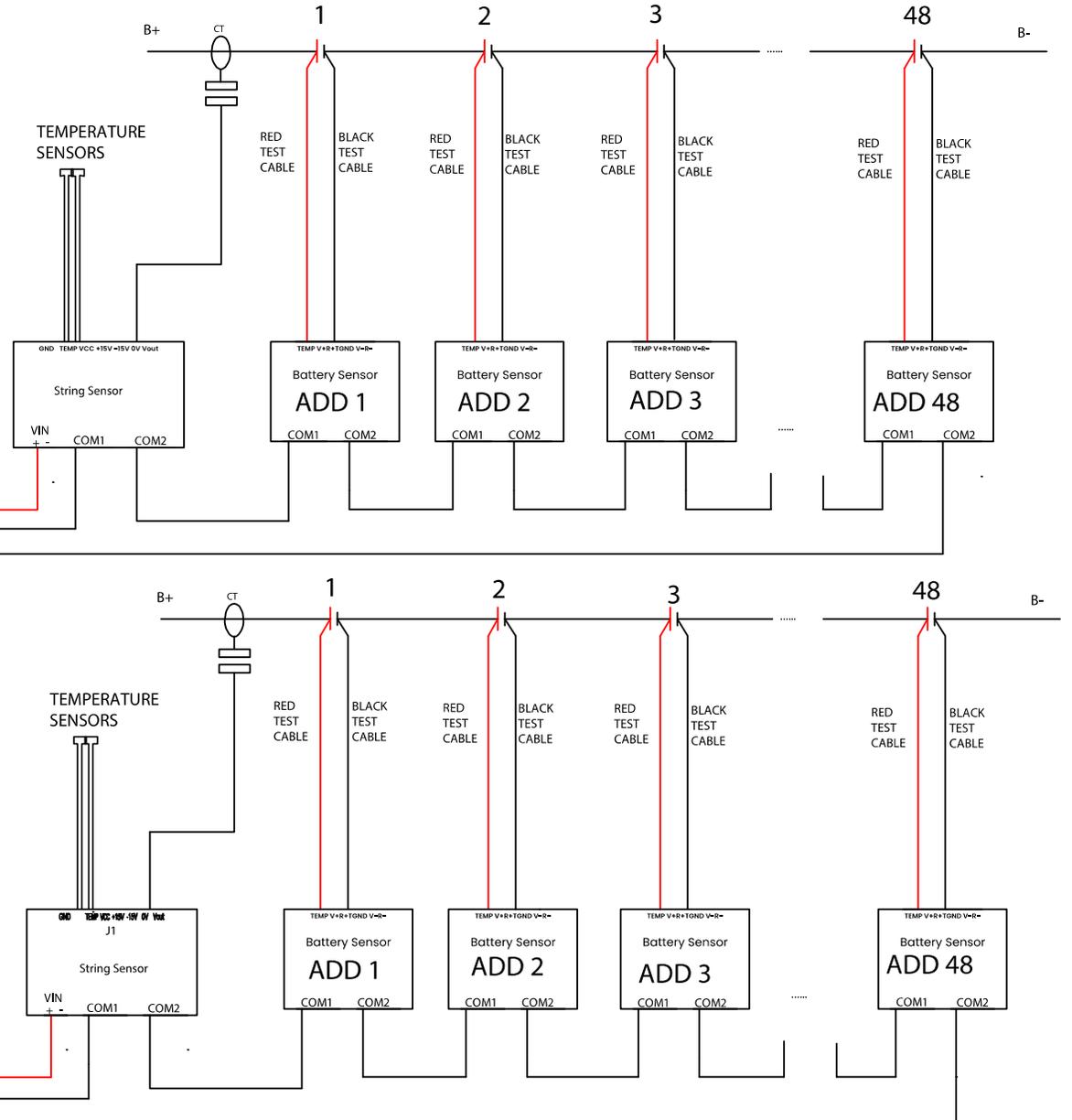
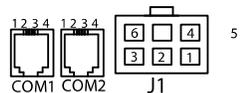


SKETCH OF INTERFACE PIN:

String Sensor



Battery Sensor





full-fledged all features battery monitoring

ENERTECT - V

- Voltage
- Current
- Ambient Temperature

ENERTECT - VR

- Voltage
- Current
- Ambient Temperature
- Internal Resistance

ENERTECT - VRT

- Voltage
- Current
- Ambient Temperature
- Internal Resistance
- Battery Temperature

ENERTECT - VRC

- Voltage
- Current
- Ambient Temperature
- Internal Resistance
- Capacity

ENERTECT - U

- Voltage
- Current
- Ambient Temperature
- Internal Resistance
- Battery Temperature
- Capacity
- Hydrogen Gas Detection
- Charge/Discharge Cycle
- Ripple Voltage



WE GUARANTEE YOUR INFRASTRUCTURE REMAIN UP & RUNNING

comply with IEEE 1188 maintenance practices

Comply with warranty guidelines of major battery manufacturers

avoid rejection of warranty claims

evaluate voltage & temperature trends period

generate performance reports





Admin
Facility Manager

- Main
- Site Dashboard >
- UPS
- 1FL-60KVA UPS1 >
- 2FL-80KVA UPS1 >
- 2FL-80KVA UPS2 >
- 2FL-30KVA UPS1 >
- 2FL-30KVA UPS2 >
- 2FL-30KVA UPS3 >
- 3FL-80KVA UPS >
- 4FL-80KVA UPS >
- Alarms
- Alarm Details >
- Settings
- Account >

BDC13

Bangalore

Alarms OverView



Latest Alarms

UPS Name	Alert Type	Alert Value	Date
2FL-80KVA UPS1	High AT	26.200	21-Oct-2020 06:07:14
2FL-80KVA UPS1	High AT	26.100	19-Oct-2020 05:53:57
2FL-30KVA UPS3	High AT	26.400	06-Oct-2020 06:18:45
2FL-30KVA UPS2	High AT	26.600	06-Oct-2020 06:18:41
2FL-30KVA UPS1	High AT	26.300	06-Oct-2020 06:18:37

[View All Alarms](#)

1FL-60KVA UPS1

String 1

Voltage	Current	Temp	Alarms
547.17 V	2.50 A	25.02 °C	48

	Bat' No	Value
High Volt	32	13.82 V
Low Volt	5	13.56 V
High Temp	6	56.70 °C
Low Temp	1	22.60 °C
High IR	7	24.61 mΩ
Low IR	32	4.03 mΩ

2FL-80KVA UPS1

String 1

Voltage	Current	Temp	Alarms
545.32 V	3.94 A	23.99 °C	2

	Bat' No	Value
High Volt	4	13.71 V
Low Volt	12	13.53 V
High Temp	20	24.50 °C
Low Temp	3	23.40 °C
High IR	26	3.78 mΩ
Low IR	25	3.24 mΩ

2FL-80KVA UPS2

String 1

2FL-30KVA UPS1

String 1

ENERTECTMAX

Admin
Facility Manager

Main

- Site Dashboard
- UPS
 - 1FL-60KVA UPS1
 - 2FL-80KVA UPS1
 - 2FL-80KVA UPS2
 - 2FL-30KVA UPS1
 - 2FL-30KVA UPS2
 - 2FL-30KVA UPS3
 - 3FL-80KVA UPS
 - 4FL-80KVA UPS
- UPS Dashboard
- Battery Trends
- Alarms
 - Alarm Details
- Settings
- Account

UPS Dashboard
UPS Name: 4FL-80KVA UPS

Total Strings : 1 | Battery Brand: 12V-200AH | Battery Per String: 40 | Battery Capacity: 200 | Installed on: Not set

String 1

String 1



Voltage	537.47 V
Temperature	22.50 °C
Current	4.69 A

Voltage Status

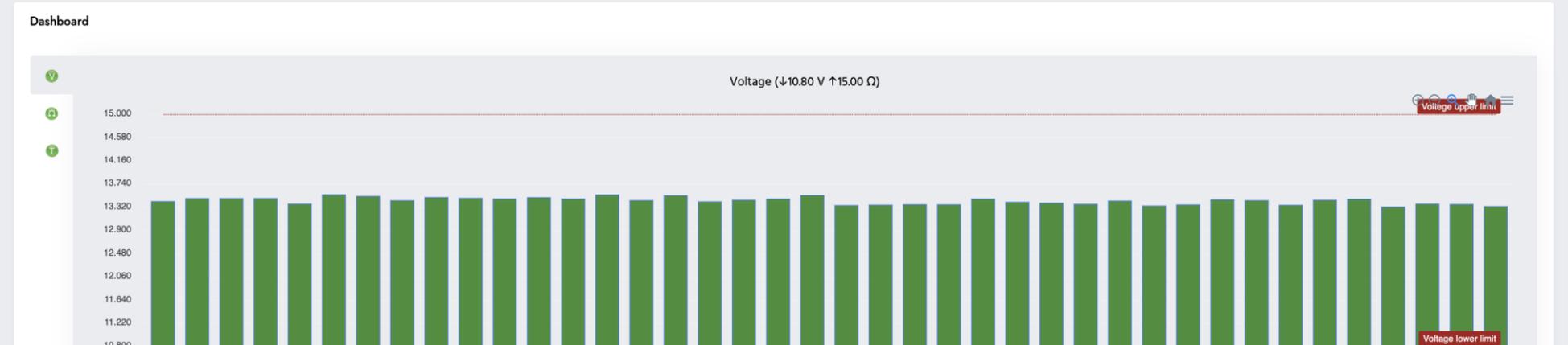
Status	Value
Min BattNo	37.00
Min(V)	13.33
Max BattNo	6.00
Max (V)	13.55
Avg Dev(mV)	0.01
Max Dev(mV)	0.00

IR Status

Status	Value
Min BattNo	17.00
Min (Ω)	2.57
Max BattNo	34.00
Max (Ω)	4.52
Avg Dev(mΩ)	0.00
Max Dev(mΩ)	0.00

Temperature Status

Status	Value
Min BattNo	23.00
Min (°C)	21.10
Max BattNo	33.00
Max (°C)	22.70
Avg Dev(°C)	0.02
Max Dev(°C)	0.00

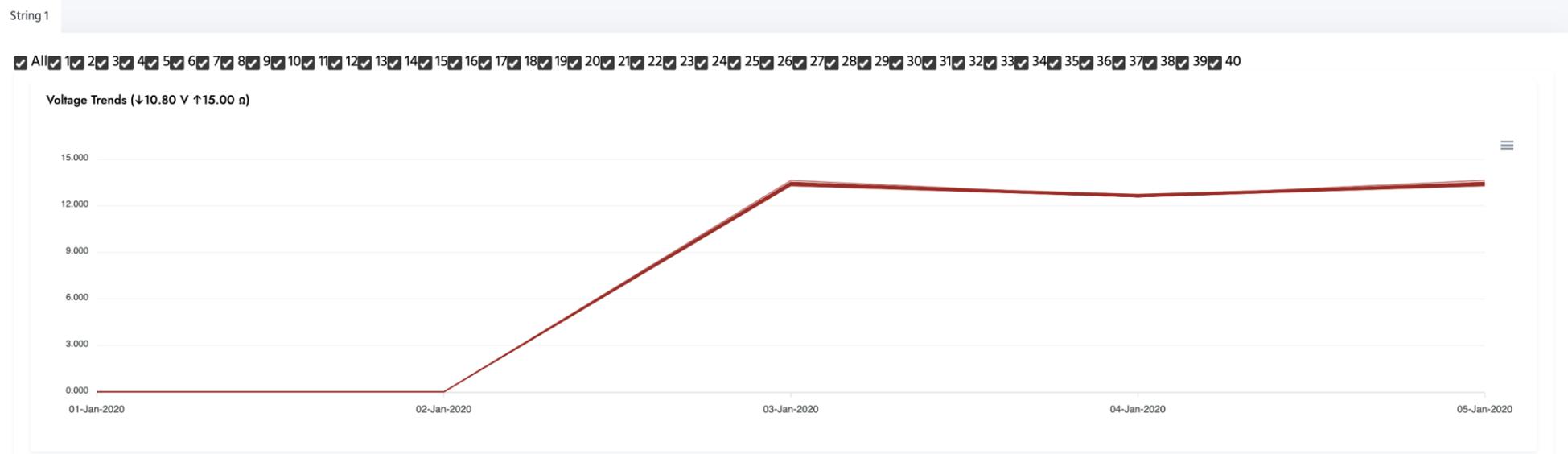


- Site Dashboard >
- UPS
 - 1FL-60KVA UPS1 >
 - 2FL-80KVA UPS1 >
 - 2FL-80KVA UPS2 >
 - 2FL-30KVA UPS1 >
 - 2FL-30KVA UPS2 >
 - 2FL-30KVA UPS3 >
 - 3FL-80KVA UPS >
 - 4FL-80KVA UPS >
- UPS Dashboard
- Battery Trends
- Alarms
 - Alarm Details >
- Settings
- Account >

Custom Dates

From Date: 01/01/2020 To Date: 05/01/2020

Load Data





Admin
Facility Manager

Main

Site Dashboard >

UPS

1FL-60KVA UPS1 >

2FL-80KVA UPS1 >

2FL-80KVA UPS2 >

2FL-30KVA UPS1 >

2FL-30KVA UPS2 >

2FL-30KVA UPS3 >

3FL-80KVA UPS >

4FL-80KVA UPS >

UPS Dashboard

Battery Trends

Alarms

Alarm Details >

Settings

Account >

Alarm Details

Export Data

Drag a column header here to group by that column

Alarm Date	Alert Type	UPSName	StringName	Battery Config ID	Alert Value	Resolved	Action Taken	Problem Resolved Date	ResolveValue	ResolveTime(dd:hh:mm:ss)
21 October 2020	High AT	2	String 1		26.200	Open		22 October 2020	24.900	263.06:00:09
10 July 2019	High IR	3	String 2		5.798	Closed		20 September 2019	3.494	71.17:26:52
10 July 2019	Comm Alarm	2	String 1		259.000	Closed		10 July 2019	0.000	00.00:02:11
10 July 2019	Comm Alarm	2	String 1		259.000	Closed		10 July 2019	0.000	00.03:19:15
10 July 2019	Low AT	1	String 1		19.800	Closed		25 July 2019	20.100	14.02:50:55
25 July 2019	Low AT	1	String 1		19.800	Closed		25 July 2019	20.200	00.00:07:31
25 July 2019	Low AT	1	String 1		19.900	Closed		25 July 2019	20.100	00.00:05:02
25 July 2019	Low AT	1	String 1		19.900	Closed		25 July 2019	20.100	00.04:27:45
25 July 2019	High AT	2	String 1		26.100	Closed		25 July 2019	25.900	00.03:12:44
25 July 2019	Low AT	1	String 1		19.900	Closed		25 July 2019	20.200	00.00:06:26
25 July 2019	Low AT	1	String 1		19.900	Closed		25 July 2019	20.100	00.00:21:15
25 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	21.200	00.10:41:41
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:27:39
26 July 2019	Low AT	3	String 2		19.900	Closed		26 July 2019	20.100	00.03:02:21
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:08:40
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:15:31
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:17:01
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:17:32
26 July 2019	Low AT	1	String 1		19.900	Closed		26 July 2019	20.100	00.00:20:22
27 July 2019	Low AT	1	String 1		19.900	Closed		27 July 2019	20.100	00.00:20:10
27 July 2019	Low AT	1	String 1		19.900	Closed		27 July 2019	20.100	00.00:22:19
02 August 2019	Low AT	1	String 1		18.000	Closed		06 August 2019	23.900	04.00:37:27
03 August 2019	Low AT	3	String 2		19.700	Closed		07 August 2019	20.100	04.04:28:54
07 August 2019	Low AT	3	String 2		19.900	Closed		07 August 2019	20.100	00.00:06:10
07 August 2019	Low AT	3	String 2		19.900	Closed		07 August 2019	20.100	00.00:04:08
07 August 2019	Low AT	3	String 2		19.900	Closed		07 August 2019	20.100	00.00:08:16

THANK YOU



Global Power Source Pte. Ltd.
140 Robinson Road
Crown at Robinson
Singapore 068907
Contact: +65 63386879

Info@enertect.com
www.enertect.com

ENERTECT®

