

# Smart monitoring system

## Site monitoring



### Description

The smart monitoring system is a modular solution to monitor telecom site electrical parameters. The solution is possible to add on to existing power systems and network with multisite monitoring software solution. The hardware is prepared to communicate with Delta's ORION controller.

The smart monitoring system consists of two different measuring units: One for DC and one for AC measurements. The AC unit is used for AC current and voltage measurements. It comprises also of control relays for AC.

The DC unit is used for DC current measurements and signal handling. One unit can handle up to 20 digital signals that can be used for alarm purposes or logical functions.

In addition to the basic product, there are separate kits available for future expansions. The available kits are:

- HPS module kit with 3 current and 1 voltage measurement
- IOM-String module including 2 temperature sensors (kit includes 5 digital inputs and 5 inputs for hall sensors)
- 125 A hall sensor with 5 m cabling
- 50 A hall sensor with 10 m cabling

### Main features

- AC energy measurements
- DC current measurements
- Digital inputs and signals for alarms
- Compatible with ORION controller

### Applications

- Wireless applications, network base stations, LTE
- Fixed line applications, broadband services
- Transmission

# Smart DC distribution

DC distribution with controlled & measured breakers

## Technical specifications

DC input	
Input voltage range	42-58 V <sub>DC</sub>
DC connection	Spring cage terminals
Protection	5x20 mm 2 A glass tube fuse

IOM-String kit (optional)	
Hall sensor inputs	5
Temperature measurements	2 (10 m leads)
Digital inputs	5

AC measuring unit	
AC voltage measurements Phase protection	1 x 3 Ph (10 m leads) 3 x (5x20 mm 2 A glass tube fuse)
AC current measurements CT details	6 100 A with 10 m leads
AC control relays Contact rating	4 16A @250Vac ,4000VA

Others	
Operating temperature	-45 - +65 °C
Humidity (relative)	95 % max, non cond.
Environment standard	ETSI EN 300 019-1-3
Safety standard	EN 62368-1
EMC standard	EN 300 386

DC measuring unit	
DC current measurements 50 A hall sensors 125 A hall sensors	15 9 (10 m leads) 6 (5 m leads)
Temperature measurements	4 (10 m leads)
Digital inputs	15

Ordering	
AC measuring unit	3799551200
DC measuring unit	3799551300
HPS module kit (optional)	3799632300
IOM-String kit (optional)	3799631400
125 A Hall sensor (5 m leads)	3799631500
50 A Hall sensor (10 m leads)	3799631600

HPS module kit (optional)	
AC voltage measurements Phase protection	1 x 3 Ph (10 m leads) 3 x (5x20 mm 2 A glass tube fuse)
AC current measurements CT details	3 100 A with 10 m leads