STARKSTROM
Innovation at our core

Tel +44 (0) 116 464 7480
www.starkstrom.com
33, Turn Street, Leicester LE7 1HP

RA003 Programmable Text Remote Alarm Annunciator

Product Description

This is a flush or surface mounted unit. The RA003 can interface with multiple IPS and UPS via a multi-drop RS485 connection and may be used when more than one IPS or UPS supply a single operating room or high care ward.

The RA003 has the advantages of showing the user the exact location of a fault (i.e., Bed 3, Sockets 5 to 10) and detailed UPS alarms. The unit also has a RS232/Modbus output for a BMS interface.

Function

If any of the pre-set values are breached the screen turns yellow and a buzzer is sounded, which can be muted. The buzzer can re-sound every 20 minutes. Information and features include:

- IPS insulation/load/temperature information.
- EDS alarms – location of circuit with insulation fault.
- 8-line text display with alarm logging of date and time for each event.
- UPS alarms – mains fail.
- Bypass/UPS on/battery fault.
- Information within the IPS/UPS system can be mapped via the Modbus output to the BMS.
- Green, Amber, Red LEDs optional with test button.

The alarms on the display will not re-set until the fault has been cleared. A second fault will reactivate the audible and visual alarm.

Dimensions (mm)

Flush and Surface Mount	250 x 174 x 70
Panel Mount	104 x 121 x 35

Features and Benefits

Event logging of alarms includes date and time of each event (activated, acknowledged, and cleared). This removes the guesswork of when a fault occurred or when it was cleared, so improves maintenance and the ability to locate faults.

A description of the circuit containing the earth fault can be displayed i.e., Mains Fail, UPS Not Running, Battery Fault. Assists with UPS fault finding and helps reduce down-time.

Information within the IPS/UPS system can be mapped via the Modbus output to the BMS.

Removing the risk of clinical staff ignoring alarms and allows the maintenance team to determine the nature of a fault before they enter the operating room.
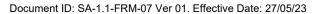
The BMS can be used to keep historical records of loadings, insulation levels, and faults, therefore assisting in maintenance utilising the RS485 port.

Cabling (by others)
Incoming Supply – 230VAC fused spur (by others), Text display – Belden 9841 or equivalent (max. 200m) and Alarm signals (screened).

Product legislation and standards of conformity

EU Ref	EU Title	UK Ref	UK Title
2014/ 35/EU	Low Voltage Directive	2016/ 1101	Electrical Equipment (Safety) Regulations 2016
2014/ 30/EU	Electromagnetic Compatibility Directive	2016/ 1091	Electromagnetic Compatibility Regulations 2016
2011/ 65/EU	Restriction of Hazardous Substances (RoHS) Directive	2012/ 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Reference	Title	Edition
EN IEC 61131-2	Programmable controllers – Part 2: Equipment requirements and tests	2017
EN IEC 61000-6-2	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments	2019
EN IEC 61000-6-4	Electromagnetic Compatibility (EMC) - Part 6-4: Generic Standards - Emissions standard for industrial environments	2018