

Sonix™ Pm 10



PA/GA power management unit

Overview

Sonix™ Pm-10 is a compact 19" 1U design unit, housing the circuitry for power distribution, switchover and management for the Sonix™ PA/GA system components. Pm-10 ensures that, at all times, critical power is protected, monitored, efficiently and securely distributed throughout the PA/GA system.

Features

- Highly efficient 1U package
- 110 to 240 Vac compatible
- High integrity power supply and cable monitoring
- Failsafe rapid dual supply switchover
- Voltage and current monitoring / indication
- Visual and remote status indication
- Individual monitored fused outputs
- Auxiliary AC power output
- Design focused MTBF / MTTR values
- RJ45 connectivity for easy maintenance

For high criticality systems, requiring duplicated power inputs, the Sonix™ Pm-10 ensures PA/GA system is operational at all times; in the event of site supply failure or dangerous fluctuations then the system will automatically switch over to the standby power supply. Even under full load operation, this is achieved without any disruption to the system operation. Should the primary supply return to the system then the unit will automatically return to the primary supply and continue monitoring. At all times advising the unit status via comprehensive unit display. Support for redundant rack 48 Vdc with automatic switchover.

Rapid fit RJ45 power bus connection permits intelligent monitoring of incoming power supply and distribution cabling. Reporting of each alarm back to the 2Mx status panel, Sonix™ software interface and site wide DCS system, ensure the operator is aware of the entire system status, at all times.

Input power connection to the Pm-10 unit is via shake proof plug and socket, ensuring simple and speedy connectivity of the unit and ease of maintenance.

Fused and monitored output power is distributed between 8 x 5 A, 1 x 4 A auxiliary AC feed and 1 x 2 A 48 Vdc power distribution, providing all internal power needs in a single compact enclosure.

Certifications

Certification CE, Environmental and EMC (IEC60945)

Specifications

Mechanical/environmental	
Fixing	1U 19" industrial mounting
Weight	2 Kg max
Dimensions (H x W x D mm)	482 x 306 x 43
Material	Casing black anodise aluminium
Operating temp	-20°C to +55°C
Operating relative humidity	20 to 95% non-condensing
Service location	Safe Internal Location
Connectors	i/p: PA/PBT push fit, shake proof plug & outlet. Mating: Phoenix Contact 1711271 o/p: PA/PBT push fit, shake proof plug & outlet. Mating: Phoenix Contact 1745632 Fault & 48 Vdc connectors: PA/PBT push fit, shake proof plug & outlet. Mating: Phoenix Contact 1803578 Data bus: rapid fit 8P8C (RJ45) CAT6A modular jacks
Ingress protection rating	IP30
Electrical	
AC Input Voltage	100-250Vac 50-60Hz
DC Input Voltage	48 Vdc ±1% regulated, 95W max. load
Consumption Dc	100 mA
Pm-10 unit protection	Individually fused outputs, 8 x 5A, 1 x 4A (Aux) and 1 x 2A (48 Vdc)
DC Output	48 Vdc ±1% regulated, 95W max. load
General	
Fault contact	Volt free max 60 Vdc/30 Vac normally closed, open on fault (non-latching)
Status indicator	High visibility LED displays
Connectivity (all internal connectivity can be radial or self-healing loops as standard)	
Power bus	2 x RJ45, 1 independently monitored loops allowing for full power, voltage and current indication and diagnostics (see 2Mx datasheets)
AC Input	3-way Terminal block, accepting up to 16mm ² solid or with suitable ferrule
AC Outputs	3-way Terminal block, accepting up to 2.5mm ² solid or with suitable ferrule
DC Input/DC Output	2-way Terminal block, accepting up to 1.5mm ² solid or with suitable ferrule
Fault	2-way Terminal block, accepting up to 1.5mm ² solid or with suitable ferrule

Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

