Power Port 5FR-UNI DATASHEET

The Power Port 5FR-UNI is versatile power distribution module that works with Gallagher, Inner Range and DIN rail mounting options.

The PP5FR-UNI Features self-healing fuses, fire trip interface, expansion and monitoring options.

Applications

- Power distribution for electronic access control and security devices
- Fused over-current protection
- Automatic fire alarm emergency release of electric door locks
- Fire trip monitoring

Features

- Mounting holes to suit Gallagher ¼ footprint & Inner Range "C" size footprint
- DIN rail mounting kit available as an option
- Five individual, self-healing fused outputs, each with status LED
- Individually field-selectable power outputs – fire power or standard power
- Drive fire relay directly from FIP voltage or onboard voltage via N/C FIP contact
- Unfused voltage output for expansion

Benefits

Universal Mounting. The PP5FR-UNI can be mounted directly into Gallagher and Inner Range expander footprints saving space and installation time. An optional kit allows mounting on DIN rail.

Self-healing fuses reduce system down time and increase security. The fire alarm monitoring output alerts security teams when there is a fire alarm or fire alarm input fault.

Technical Data

Input voltage range	5-15V DC
Fire relay coil voltage	12-15V DC (or dry contact)
Max. standard power current	8A
Max. fire power current	8A
Max. constant current per output	2A
Fused outputs	5
Fuse type	2A Self-healing PPTC
Mounting	Gallagher ¼ and Inner Range "C" size
Dimensions	95 L X 95 W X 34 H (mm) (Inner Range) 87 L X 70 W X 34 H (mm) (Gallagher)
Country of origin	China

Connections

Terminal	Description	Max Conductor Size
P1 – FT- FT+	Fire panel trip interface	2.5mm^2
P2 – + DC -	DC Power supply input	2.5mm^2
P3 - EXP	Expansion Output	2.5mm^2
P3 1 - 5	Fused outputs	2.5mm^2
P3 A-A	Monitoring/NC output	2.5mm^2

Function

Power Input. The PP5FR-UNI module is powered by any 12VDC (13.8) supply connected to the clearly marked input terminals.

Fused Outputs. The five power outputs are each individually protected by a self-healing PPTC fuse that will activate when a current greater than the fuse rating is drawn via the output. The fuses will automatically reset when the fault has cleared, allowing power to be restored to the output.

The five outputs can be fed either directly from the power input or indirectly via the fire trip relay (for 'fire power'). This function is set via a jumper/link for each output and can be changed at any time to suit requirements.

Each output has an individual status LED. The LED will be active whenever power is available at the output. The LED will deactivate in the event of a blown fuse or if that output is set to fire power and the fire relay has tripped. Each status LED is located directly under the appropriate glass fuse to greatly aid visual confirmation of fuse status.

Fire Trip Relay. The fire trip relay may connect to the fire indication panel in two modes. It can be activated by 12VDC from the fire panel or via a voltage free, normally-closed contact at the fire panel or other device. The operation mode is set by an on-board jumper.

When the relay is active, power will be available via the primary relay contact. This power is the input power switched via the relay and is commonly known as *fire power*. Fire power can then be used at each output. If the relay de-activates due to a fire alarm, then the fire power will no longer be available.

Fire Trip Monitoring. A secondary contact of the fire relay is used for monitoring. The status of the fire trip relay can be indicated to any security panel via this output.

Expansion Output. The expansion output provides un-fused fire power and ground connections. These can be used to power additional fuse modules/equipment directly or provide a slave fire trip to another Power Port fuse module.

Expansion

Output terminals are provided for connection to expansion modules PP10HD/PP10MG or other equipment. The expansion output provides fire power and ground. Several additional power distribution modules can be added at any time if current limits of the fire relay, modules and power supply are not exceeded.

Additionally, the normally closed relay status output can be used to operate an additional PP5FR-UNI (or PP8FR/PTC module) either in a local panel or remotely. In this way modules can be added to suit any size access control/security system.

See the PP5FR-UNI installation note for more expansion details.

Mounting

The PP5FR-UNI module features mounting options for Gallagher or Inner Range panels.

Integriti "B" Size	
PP5FR UNI	"C" Size

Out-of-the-box the PP5FR-UNI will fit and mount into the Inner Range "C" size footprint, such as used by the UNIbus expanders. Four pan head machine screws are provided.

Gallagher 8 in 4 Out	
PP5FR UNI	8 In

The PP5FR also fits into the smaller Gallagher ¼ footprint, such as used by the 8-input expander. To achieve this, two PCB sections are snapped away. Four self-tapping screws are provided.
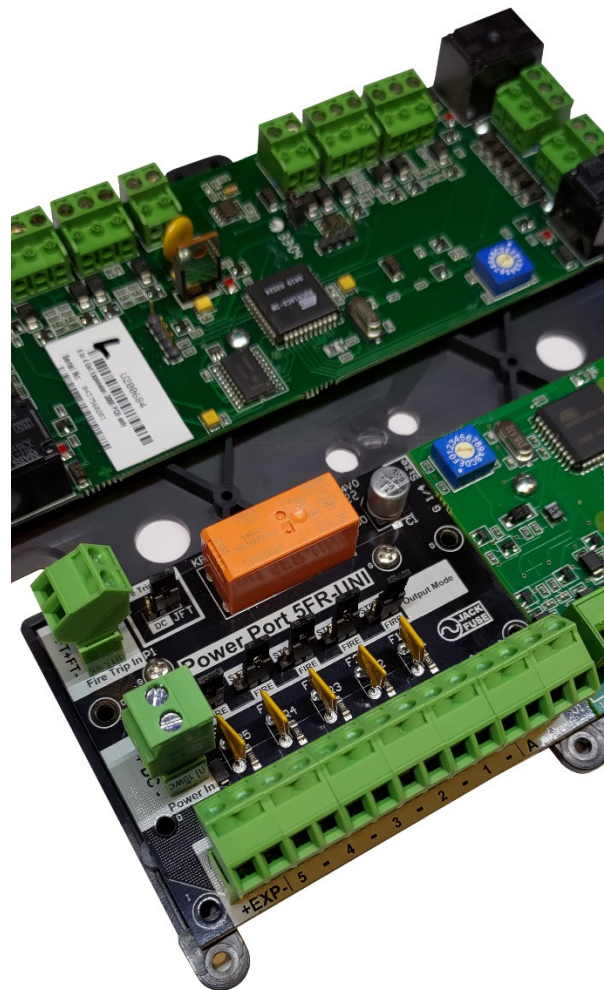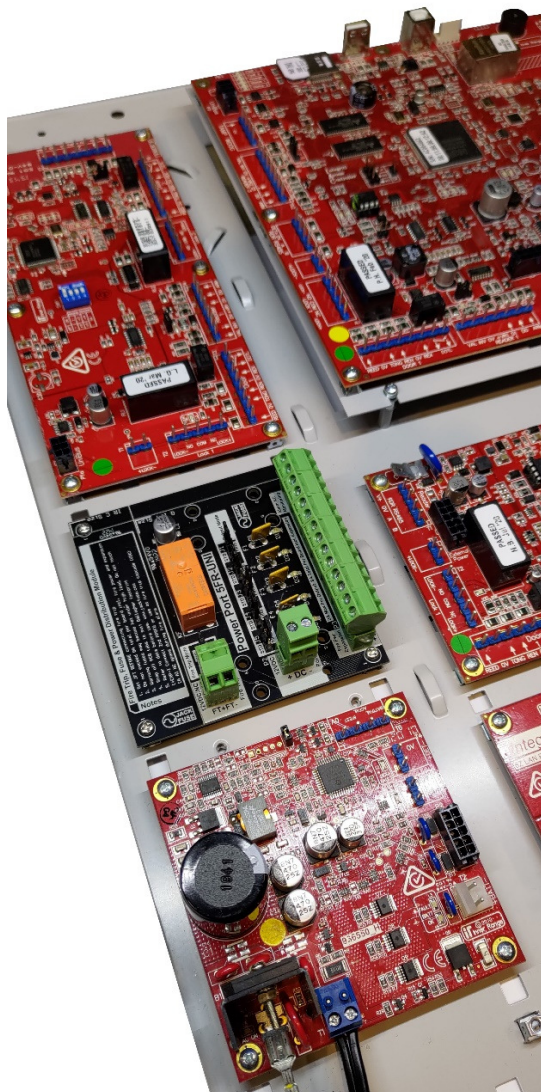
An optional DIN rail mounting kit (PPDIN1) can be used to mount the PP5FR-UNI on most DIN rail profiles.

Mounting Examples. Inner Range (left) and Gallagher (right).

Specifier Text

PP5FR-UNI

Electric locks on any door in a fire egress path must be interfaced to the emergency evacuation system in order to unlock during an alarm. This shall be achieved via an interface relay built into a power distribution module. A secondary fire interface relay contact shall be monitored for alarm activation.

Each electric lock shall be individually powered via a fused output from the fire tripped power distribution module. (Refer to AS/CA S0009:2020) The fire trip module shall have field selectable outputs that can provide either standard (non-tripped) power or fire tripped power. Self-healing fuses shall be used to help ensure system reliability and reduce service costs.

Ordering Code

PP5FR-UNI	Power Port 5FR-UNI, mounts in Inner Range and Gallagher footprints. Supplied with fire relay and 5 X PPTC fuses.
PPDIN1	Optional mounting kit for the PP5FR-UNI. Suits most DIN rail profiles.
PP8FR	Power Port 8FR supplied with a din rail mount kit, fire relay and 8 X 1A glass fuses.
PP10MG	Power Port 10MG supplied with a din rail mount kit and 10 X 1A glass fuses
PP8PTC	Power Port 8PTC supplied with a din rail mount kit, fire relay and 8 X PPTC fuses.
PP10HD	Power Port 10HD supplied with a din rail mount kit and 10 X 1A PPTC fuses

Learning

Become a **Jack Fuse Product and Power Certified Technician**. Free training available online.

More Information: For complete installation notes, data sheets and technical support please visit www.jackfuse.com