



The VESDA VLF MCC (Multi-function Control Card) is an interface card for the range of Xtralis VESDA VLF smoke detectors. An MCC expands the range of input and output communications a VLF detector can perform.

### Why use a VLF MCC?

Installing a VLF MCC into a VLF detector provides a cost-effective solution for customers who need enhanced connectivity, fault detection and monitoring, and annunciation of alarms and faults. The principal benefits include:

#### Improved FACP connectivity

The VLF is fitted with two (2) alarm relays in its standard form. With an extra two (2) relays, the Multi-function Control Card allows reporting of all four (4) alarm levels on dry relay outputs.

#### Enhanced annunciation

An MPO (Monitored 24 V Powered Output) is available on the VIC-030 version of the card. The MPO provides power to devices such as sirens or strobes, and monitors the line integrity.

#### Enhanced control and fault detection

With a VLF MCC installed, a VLF has two (2) General Purpose Inputs (GPIs), allowing, for example, one GPI to report on loss of mains power and the other GPI to be used as a reset input.

The VIC-030 version of the card has a self-configuring GPI, depending on the jumper selection for MPO/Relay3.

- If MPO is selected, activation of the GPI will disable the MPO.
- If Relay3 is selected, the GPI will be set to External Fault (e.g. for mains power supply monitoring).

## Features

### VIC-020

- Provides two (2) additional relays
- Provides an extra General Purpose Input (GPI) with line monitoring
- Quick and simple to install
- Out-of-the-box operation, with minimal configuration required for extra features
- Diagnostic LEDs give visual indication of the card's status
- Fully compatible with Xtralis VESDA VLF smoke detectors

### VIC-030

- As above, plus:
- Selection between 3rd relay or 24 V Monitored Powered Output (MPO)

### Specifications

#### Dimensions

Length x Width x Height	110 mm (4 1/3") x 70 mm (2 3/4") x 20 mm (13/16")
Weight	0.08 kg (0.176 lb)
Terminals	0.2 - 2.5 mm <sup>2</sup> (30-12 AWG)

#### Electrical Ratings

Power consumption	1 W from the detector at 24 VDC (less than 42 mA)
Relay outputs	2 A at 30 VDC
MPO input power supply	24 VDC (VIC-030 only)
MPO input current	100 mA more than MPO output load (VIC-030 only)
MPO output current	1 A (maximum) (VIC-030 only)
End of line resistor (MPO & GPI)	2.7K Ohm

#### Operating Conditions

Tested to	-10 to 55°C (14 to 131°F)
Detector ambient temperature	0 to 40°C (32 to 104°F)
Humidity	5% to 95% (non-condensing)

#### Detector Compatibility

Supports VLF-250 and VLF-500

#### Product Warranty

2 years

#### Input/Output Assignments

##### VIC-020

Output for Relay 1: **ALERT** (follows latching configuration of VLF ALERT status)

Output for Relay 2: **FIRE-2** (follows latching configuration of VLF FIRE-2 status)

Input for GPI: **FAULT**

GPI reports status on following conditions:

- EOL > No fault
- Short > Fault # 115/IFF6
- O/C > Fault # 111/IFF8

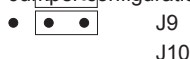
##### VIC-030

Output for Relay 1: **ALERT** (follows latching configuration of VLF ALERT status)

Output for Relay 2: **FIRE-2** (follows latching configuration of VLF FIRE-2 status)

MPO: **ALERT** (unless disabled) (follows latching configuration of VLF ALERT status)

**Jumper configuration**



GPI for MPO: **Disable MPO**

MPO status is driven as follows:

- EOL > MPO enabled
- Short > MPO disabled\*
- O/C > MPO enabled and Fault # 111/IFF8

Output for Relay 3: **DISABLED** or **STANDBY** (follows VLF DISABLED or STANDBY status)

**Jumper configuration**



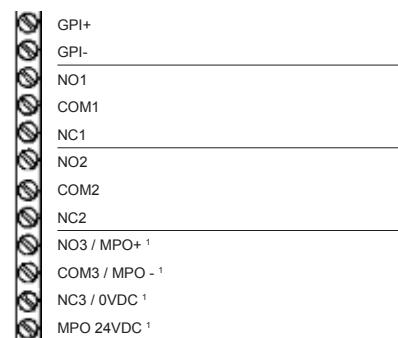
GPI for Relay 3: **FAULT**

GPI reports status on following conditions:

- EOL > No fault
- Short > Fault # 115/IFF6
- O/C > Fault # 111/IFF8

\* The MPO is disabled if there is a short on the GPI.

### Terminal Block Connections



<sup>1</sup> available only on VIC-030

### Visual Status Indicators

Diagnostic LEDs indicate:

- power to the MCC
- power to the MPO (VIC-030 only)
- relay activated state
- MPO activated state (VIC-030 only)
- MPO power and line fault (VIC-030 only)
- internal communications status
- GPI state
- GPI line fault

### Ordering Information

Product	Part number
VESDA VLF MCC	VIC-020
VESDA VLF MCC with MPO	VIC-030

Includes: control card, interface cable, single screw, field wiring connectors and end of line resistor(s) (one resistor for VIC-020 or two resistors for VIC-030).