The Xtralis 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 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 (41/3") x 70 mm (2 3/4") x 20 mm (13/16")
Weight	0.08 kg (0.176 lb)
Terminals	0.2 - 2.5 mm^2 (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

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
- ● [● ●] J9
- ● [● ●] J10

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
- [● ●] ● J9
- [● ●] ● J10

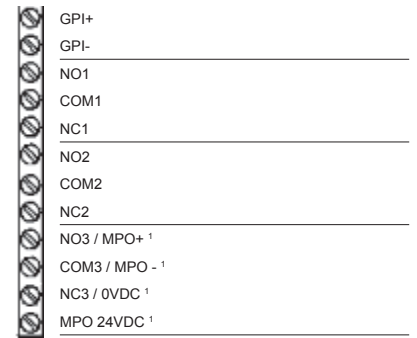|	
GPI for Relay 3:	**FAULT**

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

GPI+	
GPI-	
NO1	
COM1	
NC1	
NO2	
COM2	
NC2	
NO3 / MPO+ [1]	
COM3 / MPO - [1]	
NC3 / 0VDC [1]	
MPO 24VDC [1]	

[1] 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
Xtralis VESDA VLF MCC	VIC-020
Xtralis VESDA VLF MCC	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).