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)
Xtralis VESDA VLF MCC

**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 mm² (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 # 11/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)
- Output for MPO: ALERT (unless disabled) (follows latching configuration of VLF ALERT status)
- Jumper configuration:
  - • • • J9
  - • • • J10
- GPI for MPO:
  - MPO status is driven as follows:
    - EOL > MPO enabled
    - Short > MPO enabled*
    - 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.

**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**

<table>
<thead>
<tr>
<th>Product</th>
<th>Part number</th>
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</thead>
<tbody>
<tr>
<td>Xtralis VESDA VLF MCC VIC-020</td>
<td>VIC-020</td>
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<tr>
<td>Xtralis VESDA VLF MCC with MPO VIC-030</td>
<td>VIC-030</td>
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</tbody>
</table>

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).

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**Terminal Block Connections**

<table>
<thead>
<tr>
<th>Connection</th>
<th>Description</th>
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<tbody>
<tr>
<td>GP+</td>
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<td>GP-</td>
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<tr>
<td>NO3/MPO+</td>
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<tr>
<td>MPO/COM3/MPO-</td>
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<td>NC3/OVDC</td>
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<tr>
<td>MPO 24VDC</td>
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1 available only on VIC-030