



Esprit-A Addressable Fire Alarm Panel – Part 1





Content

- Product Overview
- Connectivity Detail
- Expansion Peripherals
- Networking Options
- Programming Features



Product Overview

- Range comprises:
 - Argus **ESA-1001** - 1 to 2 Loop Panel
 - Argus **ESA-1002** - 1 to 4 Loop Panel
 - Apollo **ESA-1006** - 1 to 2 Loop Panel
 - Apollo **ESA-1007** - 1 to 4 Loop Panel





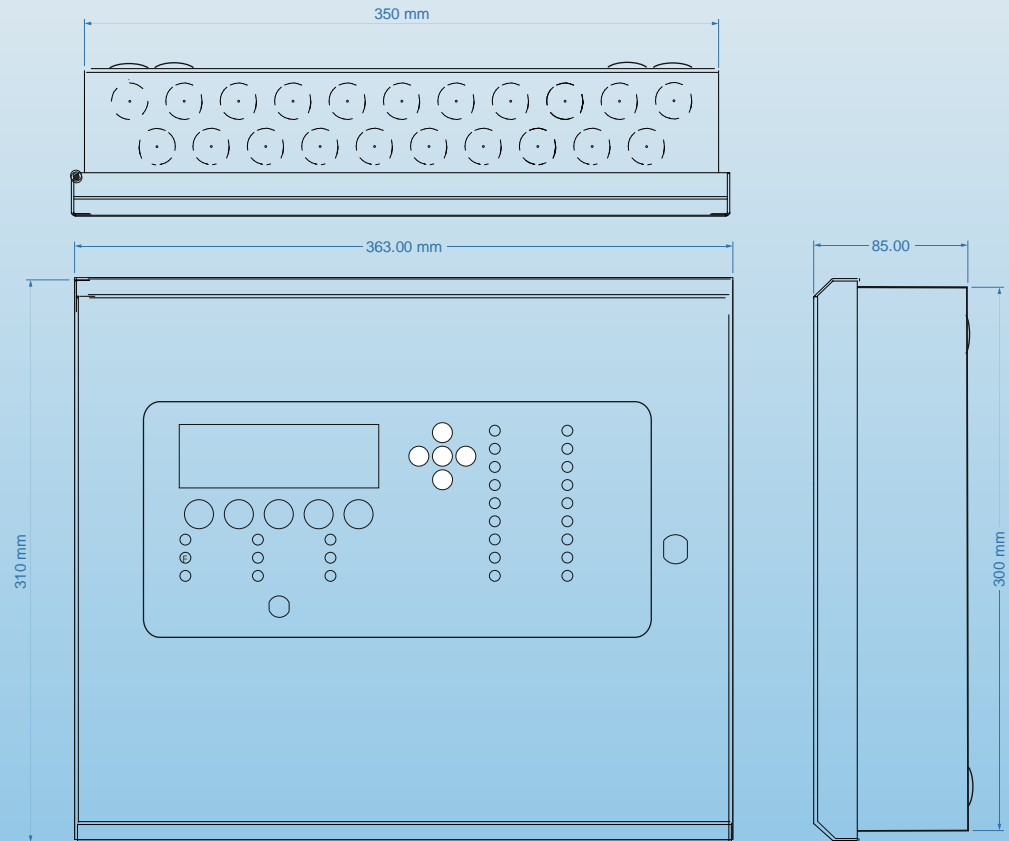
- **Argus ESA-1001 - 1 to 2 Loop**
- **Apollo ESA-1006 - 1 to 2 Loop**



- 1 to 2 Loop
- Apollo version - 126 or 252 devices or 240 / 480 (if core protocol option selected).
- Argus version - 240 / 480 devices
- 18 Zone LED's
- 500 mA per loop
- 35W 1.2A power supply
- 2 aux relays, 1x fire, 1x fault
- 400mA 24V aux supply output
- 2 x 500 mA rated electronically protected sounder circuits
- USB port for PC configuration
- 7 Ah battery capacity
- Key or code access options

Enclosure Layout

- **Argus ESA-1001** - 1 to 2 Loop Panel
- **Apollo ESA-1006** - 1 to 2 Loop Panel



Argus ESA-1002 - 1 to 4 Loop Apollo ESA-1007 - 1 to 4 Loop

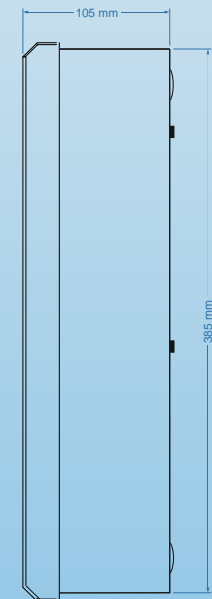
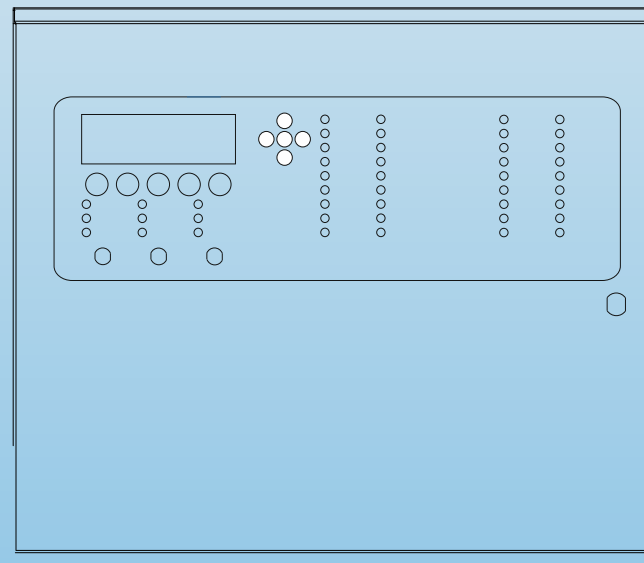
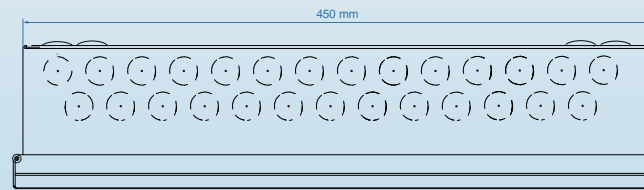


- 1 to 4 loops
- Apollo version – 126 / 504 devices or 240 / 960 (if core protocol option selected).
- Argus version - 240 / 960 devices
- 36 Zone LED's
- 500 mA per loop
- 100W 3.4A power supply
- 2 aux relays, 1x fire, 1x fault
- 400mA 24V aux supply output
- 2 x 500 mA rated electronically protected sounder circuits
- USB port for PC configuration
- 17 Ah battery capacity
- Key or code access options



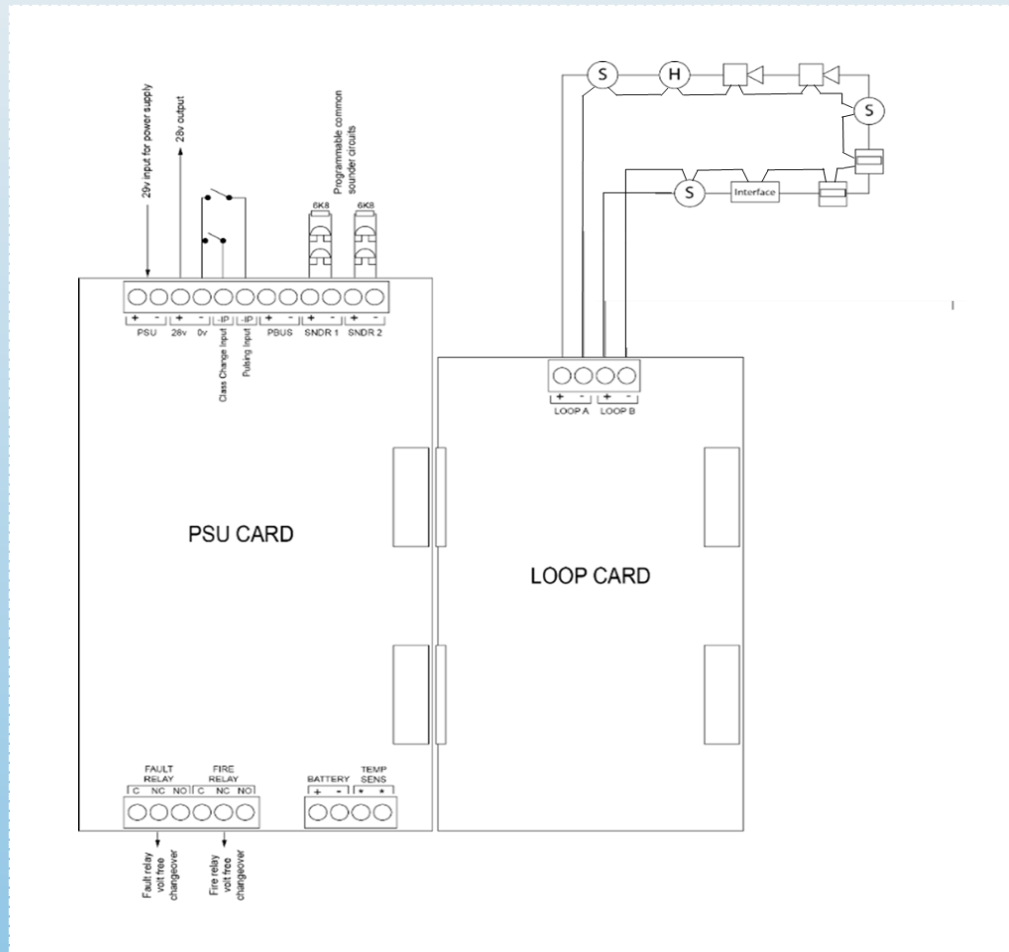
Enclosure Layout

- **Argus ESA-1002** - 1 to 4 Loop Panel
- **Apollo ESA-1007** - 1 to 4 Loop Panel





PSU & Loop Card connections

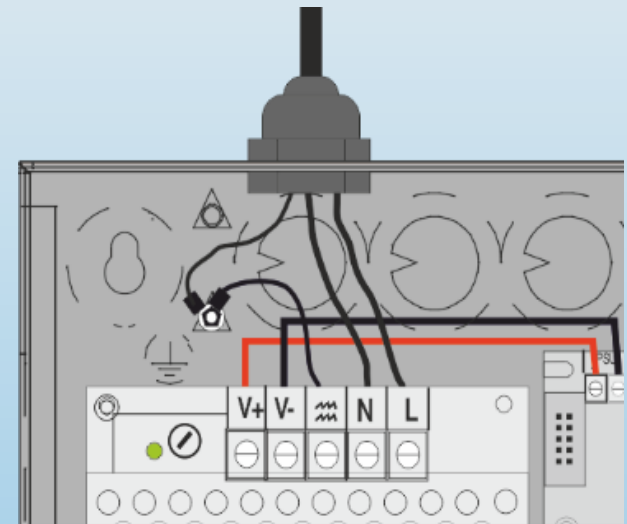




Connectivity Detail

Mains Input Connectivity

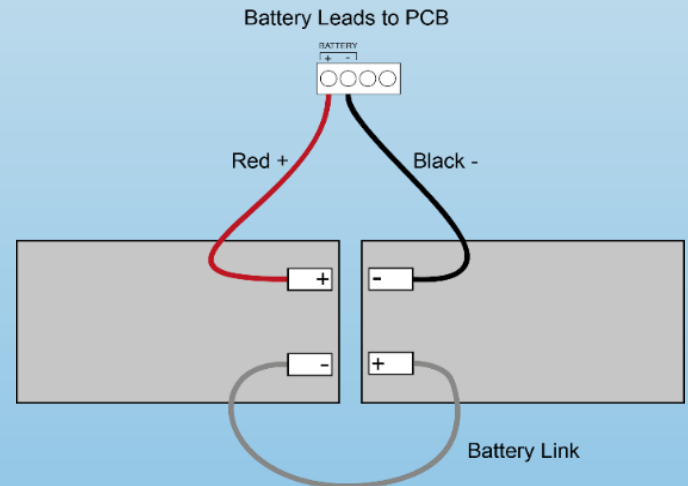
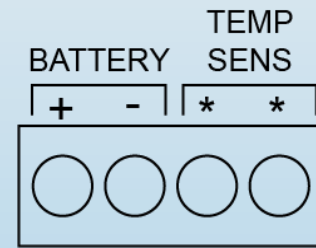
- AC mains wiring should be routed to upper left hand side of enclosure
- 2 Amp internal fuse on 1 - 2 loop
- 3 Amp internal fuse on 1 - 4 loop
- 230 V (+10%, -15% tolerance) 50 Hz
- 35W / 100W Switch Mode power supply unit





Battery & Auxiliary Supply

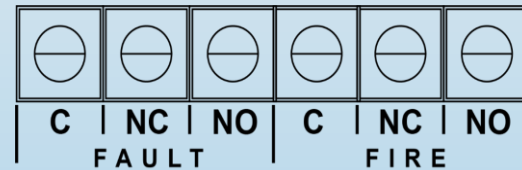
- 2 x 12V, 3.2Ah Batteries minimum requirement.
7Ah max (1 - 2 loop)
17Ah max (1 - 4 loop)
- 24V DC, 400mA output
 - Repeaters
 - Internal Peripherals





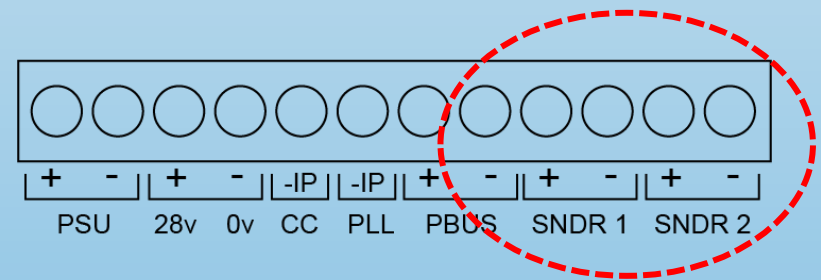
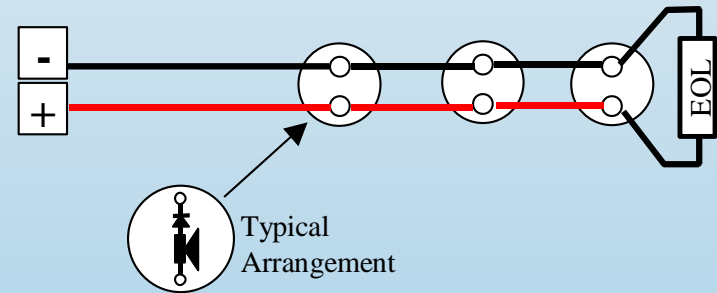
Relay Connection

- Two Aux Relay Outputs
- 30 V DC 3 Amp rated VFCO
- Relay 1 - Common Fault
- Relay 2 – Common Fire



Sounder Circuits

- 2 x on-board programmable sounder circuits
- Each 500 mA rated
- Electronic short circuit protection
- End of Line monitored – 6k8



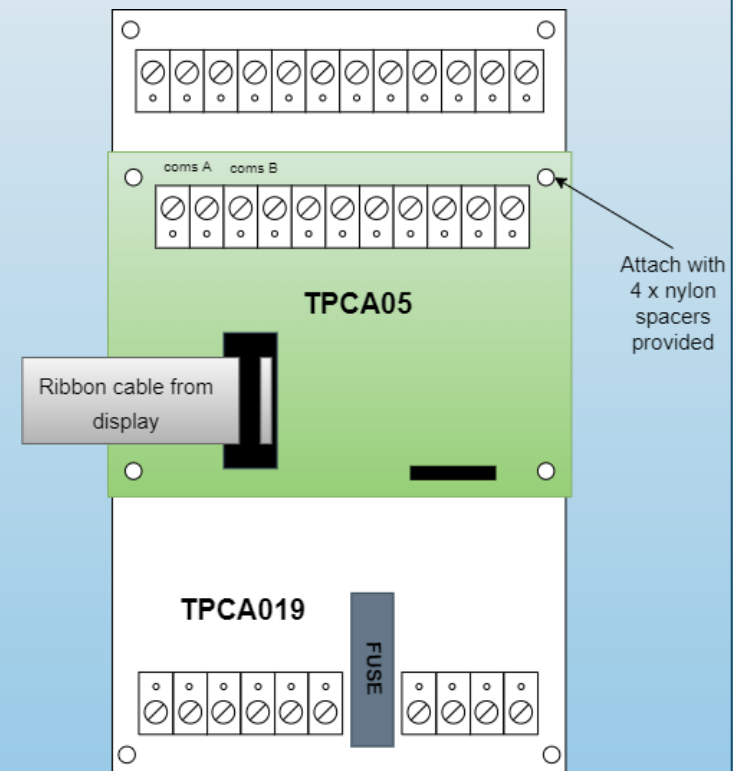


Networking Options



TPCA05 Network card installation

- Network cards must be fitted to each panel on the network.
- Network card is inserted above 'comms A' socket on PSU card.
- Set address Dil switch, add 0 for master panel, add 1 – 7 for slaves.
- Network card must be secured with the plastic standoffs supplied.

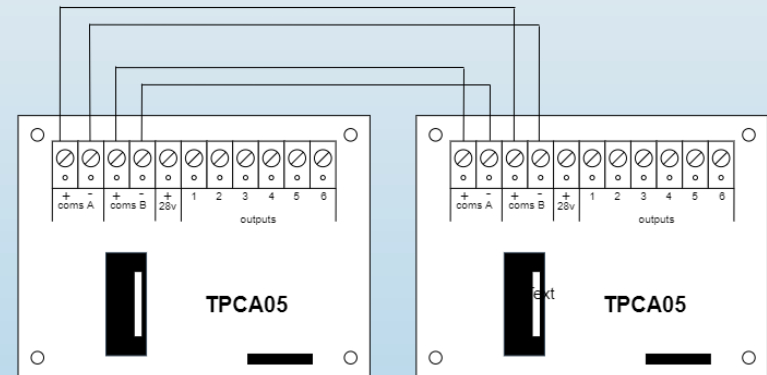




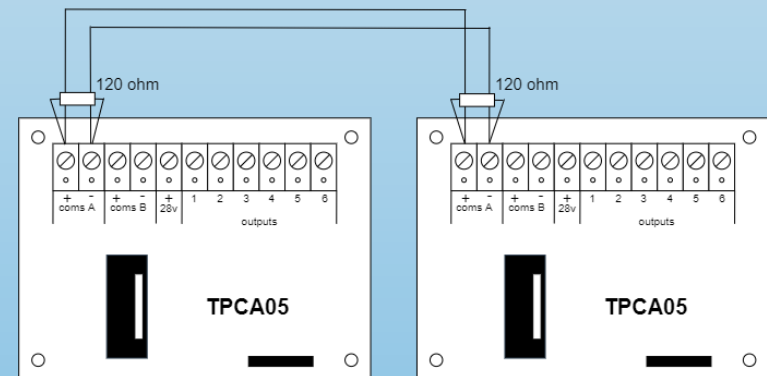
Network Wiring

- Panels / Repeaters can be wired as fault tolerant utilising 2 x 2 core cables, or legacy mode utilising 1 x 2 core.
- Legacy mode wiring will require 2 x 120 ohm resistors fitted on both ends.
- Repeater will require an additional 2 core cable for 24v DC supply from master or slave panels.

Fault tolerant connection



Legacy connection





Programming Features



Programming Features

- Common graphical LCD user interface & software
- Common menu structure for day-to-day operation of panels
- User-friendly Windows based configuration software
- Cause & Effect features are programmed only via the configuration software
- Input Actions with latching / non-latching options
- Delays can be programmed to output groups
- 64 Cause & Effect groups
- All Outputs can be programmed to de-energise on a Silence, or Reset command



False Alarm Management

- 1) Dependency Mode features can be used to help verify if an activated condition from a device is considered to be a genuine alarm before the fire alarm condition is displayed on the panel. *Supports dependency modes A, B, and C.*
- 2) Investigation Delays to Outputs – can be used to delay the operation of certain outputs after the Fire Alarm condition is displayed.



Part 2 – Menu options & Installation





Content

- Level 1 Menu Options
- Level 2 Menu Options
- Level 3 Menu Options
- Device Information
- Test Mode Options



Level 1 – General User

The functions that can be performed in Access Level 1 are:

- Mute the internal buzzer
- View active faults
- Change from General User to Authorised User; using either the Activate Controls key switch, or by entering the four-digit code to access level 2



Level 2 – Authorised User (code 1111)

The functions that can be performed at Access level 2 are:

- Resound the alarms
- Silence the alarms
- Reset the system
- Mute the internal buzzer
- Access the USER, REPORT & ENG menu's
- Access the CONFIG menu (Access level 3 code required)



Level 2

USER Menu :

Disable – Disable / Enable Devices, Zones, Sounders, Relays & Loops

Test – All zones or selected zones, with or without sounders

Delay – Turn ON or OFF any programmed delays

Scan – Scan loops for new devices without updating LEARN function

Time & date – Set time & date and set daylight saving settings

Lamp test – Test panel LED's

Contrast – Set LCD contrast and back light settings

Buzzer – Adjust buzzer volume



Level 2

REPORT Menu

Events – Number of Alarms, Faults, Disablements & Other

Status – Report status of Loops, Devices, PSU Card & Batteries

Versions – PCB software versions

History – Event history by date & time

Counter – Alarm counter by time period

ENG Menu

Outputs – Test loop device outputs

Error Seek – Indicates errors on selected loops



Level 3 – Engineering Options (code 3333)

The functions that can be performed at Access level 3 are:

- All control options as per Level 2
- Panel options
- Device option
- Network options
- PSU options



Level 3

PANEL Menu

Learn – Internal cards, Devices & Network

Tones – Set tones for, Alarms, Zonal, Evac, Delays, Alert & CC

Zones – Zone settings, Zone names & dependency mode settings

Options – Zone resound, FARE FWRE settings, Delay times

Default – Set panel back to default settings

Passwords – Set passwords

DEVICE Menu

Devices – Device name, Zone Number, Relay trig y/n, Silence y/n, Latch y/n, Dependency mode y/n

Sounders – In alarm, In evac, In delay, In class change, Silence y/n

Relays – In alarm, In evac, In fault, Fail safe y/n, Silence y/n



Level 3

Network Menu

Local Panel Control – y/n

Local Mute Control – y/n

Local Event Only – y/n

Local Zones – y/n

Network Mode – Fault tolerant / Radial (Legacy)

Local General Disablement – y/n

Local Class Change & Pulse – y/n

PSU Menu

Battery monitoring – y/n

Battery Hi Z monitoring - y/n

Charge during alarm – y/n

Earth fault monitoring – y/n

UPS mode – y/n

Low charge current – y/n



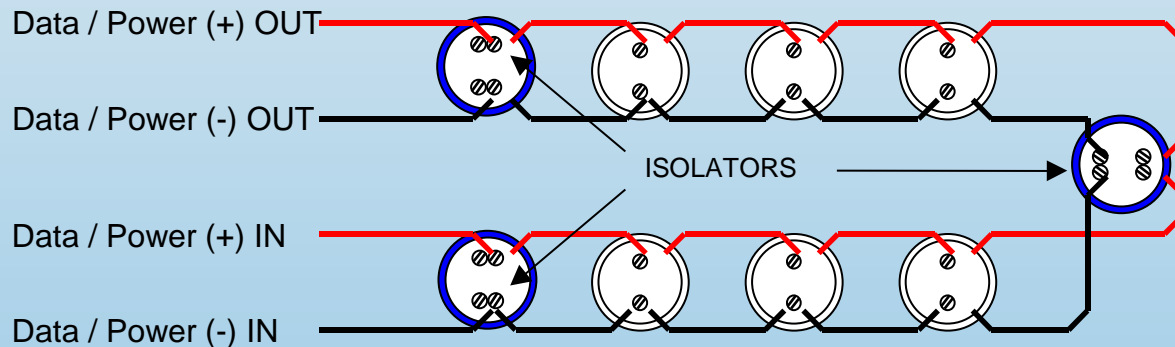
Device Information



Loop Wiring

Class A Installation with isolators

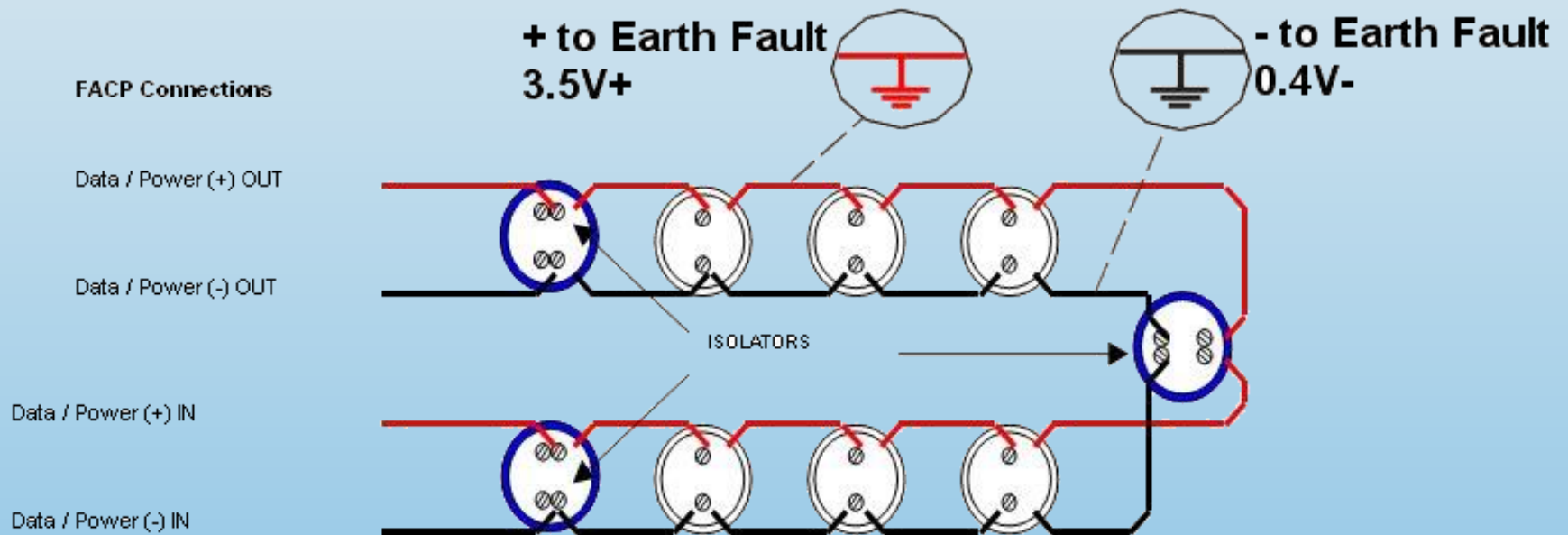
FACP Connections



Install 'Short Circuit Isolators' at strategic points in the loop
(e.g. zonal boundaries)



Earth Faults





End of tutorial