# EvacU$^{Elite}$ Distribution CPU + Network Interface Card

## 1. Description

The DCPU Card (DCPU) and the Network Interface Card (NIC) come assembled as a fixed pair as shown below. When the Network Card is fitted it will always consume Rack 1 Slot 1. (Rack 1 is closest to the PSU)

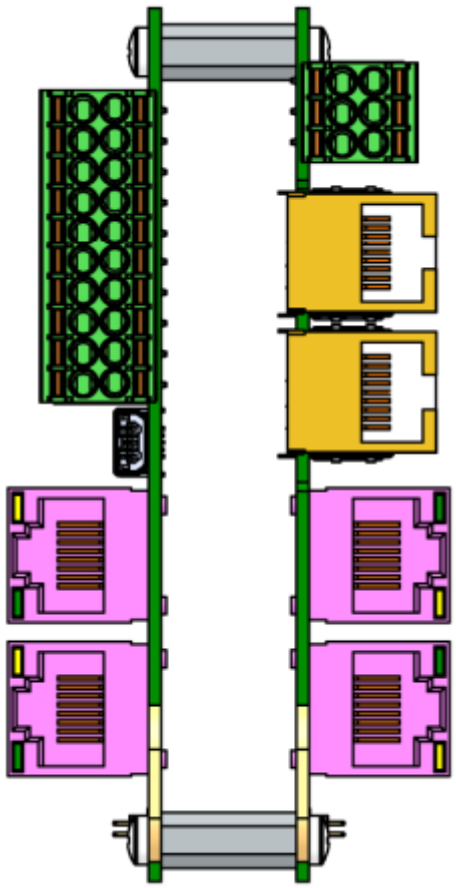
The two SFP connections on the NIC (IN OUT) allow various types of Ampac SFP Modules to be fitted into connections SFP 1 & 2. Different types of SFP Modules are available which allow network distances between buildings to be accommodated using specific cable options; FDSL Copper <750m and multiple Fibre Optic SFP options.

Ethernet 1 & 2 accommodate Cat5/6. They can be used between 'side by side' networked panels (2 nodes).

## 2. Connections

The drawings provided outline the various features and connections available on both boards

**DCPU and NIC Illustrated Below:**



| | | | |
|---|---|---|---|
| BGM 2 SHIELD | 1 | 2 | BGM 1 SHIELD |
| BGM 2 COLD | 3 | 4 | BGM 1 COLD |
| BGM 2 HOT | 5 | 6 | BGM 1 HOT |

| |
|---|
| SFP 1 |

| |
|---|
| SFP 2 |

| |
|---|
| ETHERNET 1 |

| |
|---|
| ETHERNET 2 |

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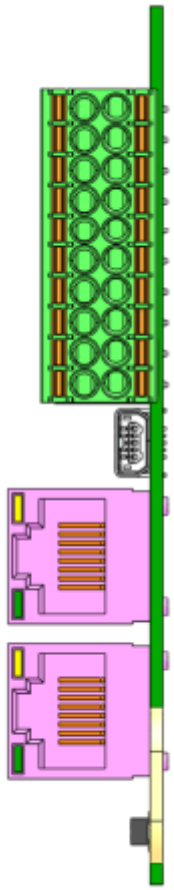

Front elevation detailing the DCPU card connection options

| | | | |
|---|---|---|---|
| BGM 1 HOT | 1 | 2 | BGM 2 HOT |
| BGM 1 COLD | 3 | 4 | BGM 2 COLD |
| BGM 1 SHIELD | 5 | 6 | BGM 2 SHIELD |
| INPUT 1 | 7 | 8 | INPUT 1 (REF) |
| INPUT 2 | 9 | 10 | INPUT 2 (REF) |
| RELAY 1-1 (NO) | 11 | 12 | RELAY 1-2 (NC) |
| RELAY 1-1 (COM) | 13 | 14 | RELAY 1-2 (COM) |
| RELAY 2 (NO) | 15 | 16 | RELAY 3 (NC) |
| RELAY 2 (COM) | 17 | 18 | RELAY 3 (COM) |
| RELAY 2 (NC) | 19 | 20 | RELAY 3 (NC) |

Mini USB Connector (Used for loading in system configuration & application

RJ45 1 provides the network connection to the GUI

RJ45-2 Redundant connection to the GUI

| | |
|---|---|
| **Audio 1 & 2** | Analog line level audio input (hot, cold and shield), 10kΩ impedance, max input +4dBu |
| **Input 1 & 2** | Supervised input, selectable EOL, common reference. |
| **Relay 1** | Double pole, single throw (1 x NO, 1 x NC, 2 x COM) |
| **Relay 2 & 3** | Single pole, double throw (COM, NO, NC) |
| ***Mini USB*** | *Not available for field connection* |
| ***RJ45 1*** | *Not available for field connection* |
| ***RJ45-2*** | *Not available for field connection* |

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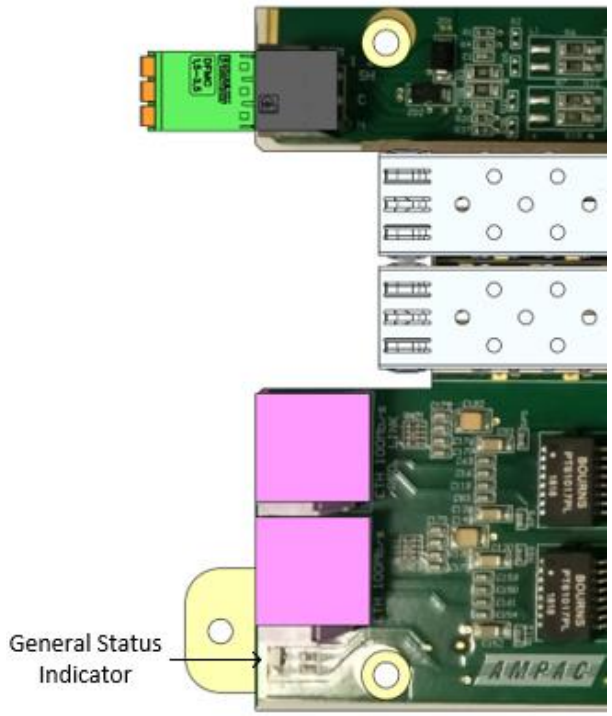



**NIC Card General Status Indicator**

OFF: cards have no power or processor is fault

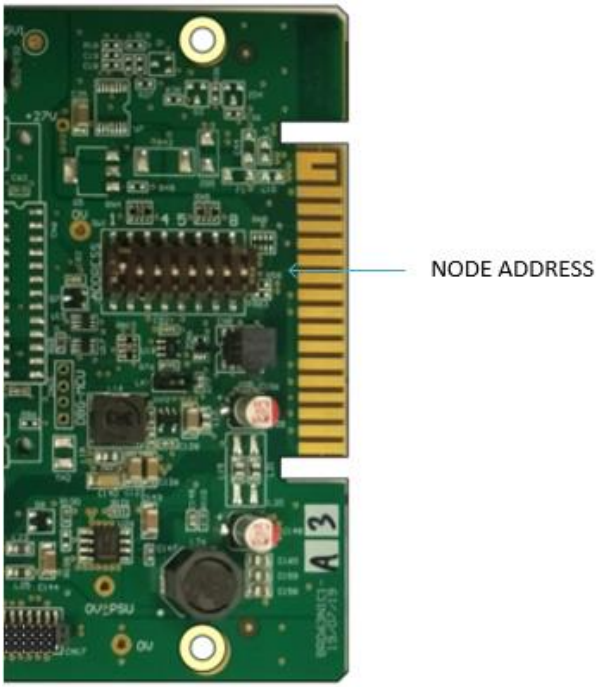
FLASHING GREEN: board is operating, no faults

FLASHING AMBER: board has a fault condition

STEADY AMBER: Not receiving commands from the Distribution CPU

This drawing is a **side elevation of the NIC - Network interface Card**

- BGM terminations at the top
- SPF module slots Female x 2 in the middle
- Ethernet connections at the bottom



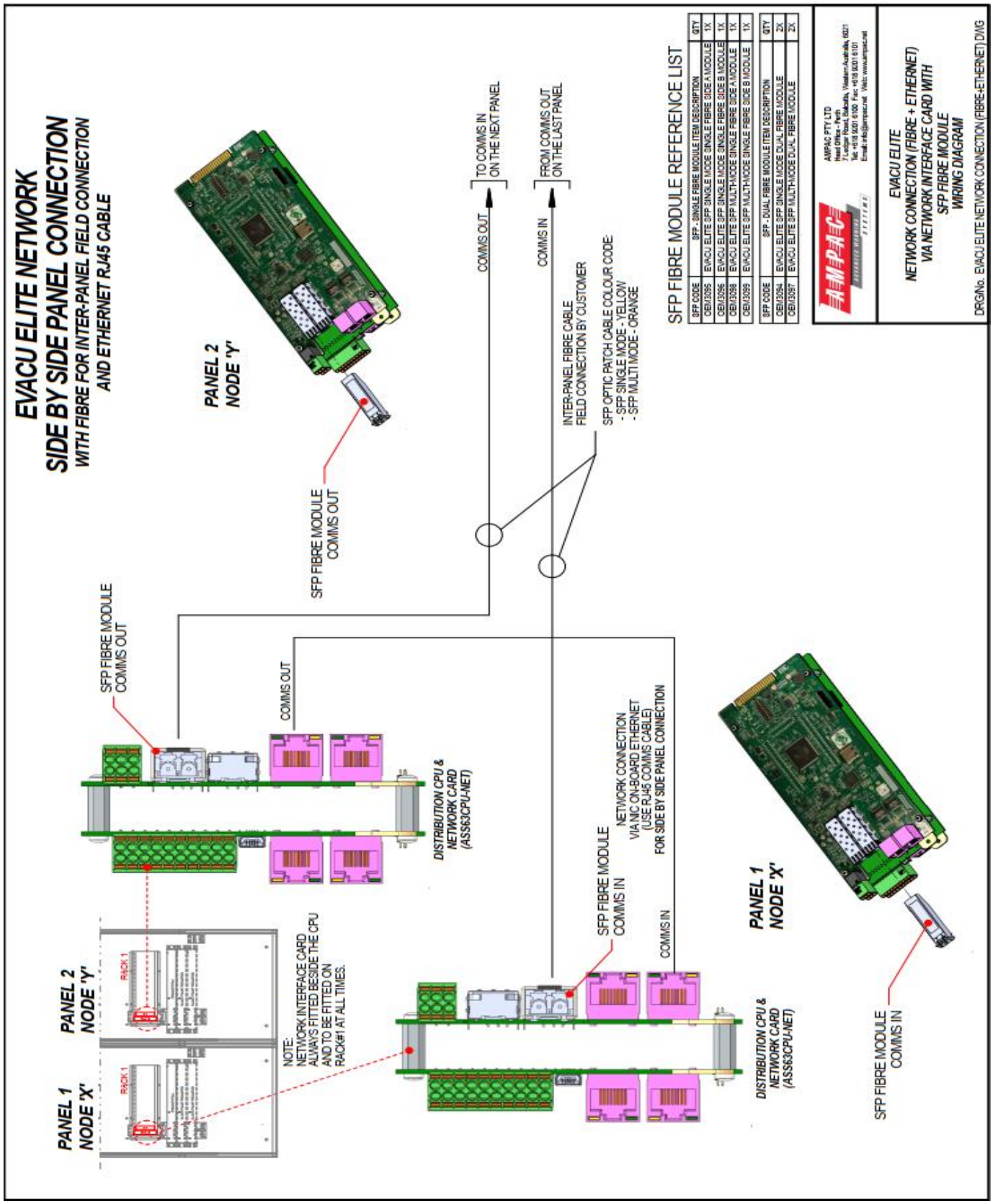

**NIC Card Node Address**

The DIP switch shown is used to set the node address.

The LSB of the address is the left switch (markings on the overlay of the PCB)

# EvacU$^{Elite}$ Distribution CPU + Network Interface Card

**Network Drawing and Module Reference List Illustrates Fibre Optic SFP Options:**



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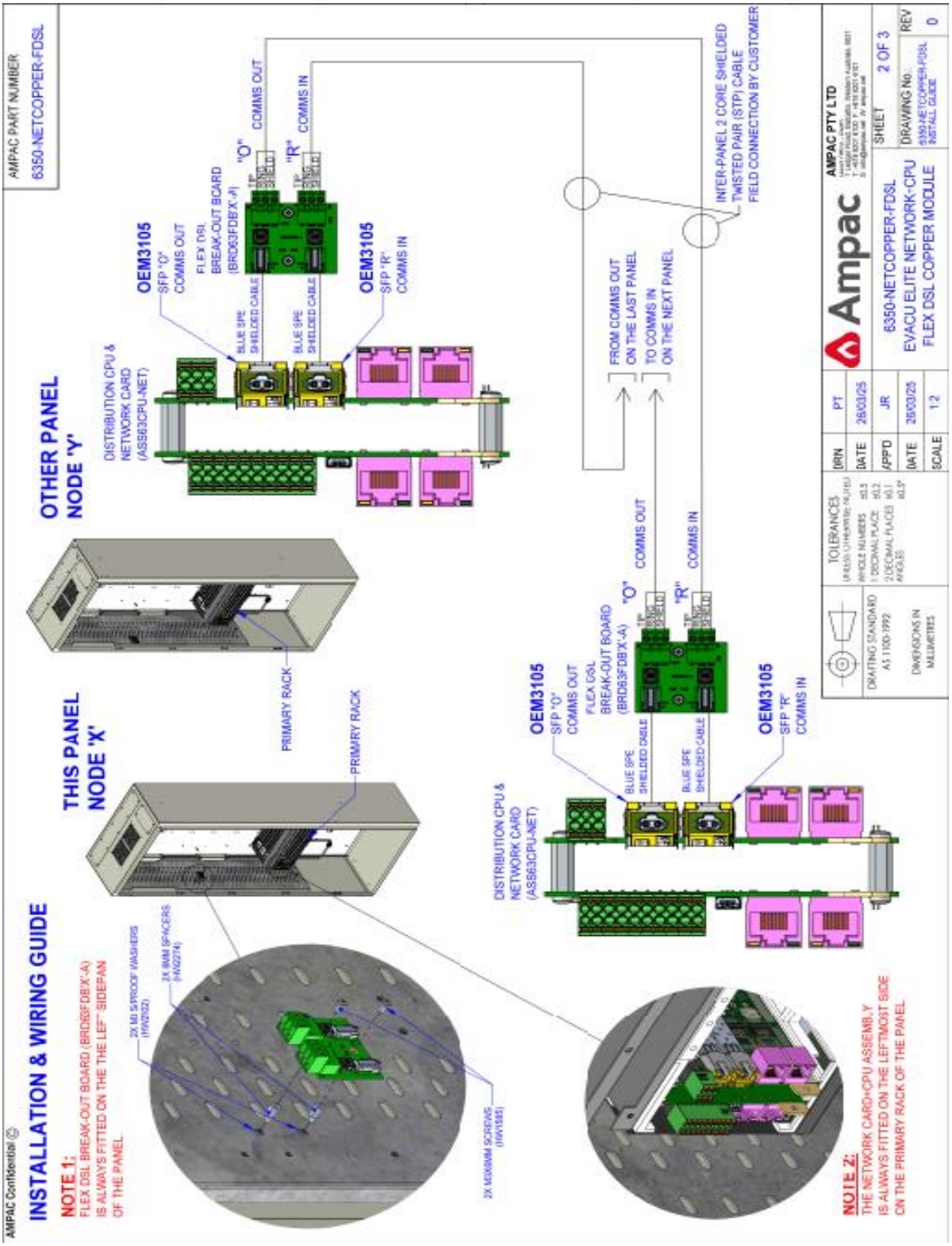
**Illustrates Copper Cable SFP Option:**

Maximum distance between two networked panels using copper and **Flex DSL** SFPs is <750m



# EvacU$^{Elite}$ Distribution CPU + Network Interface Card

A range of network connection options are illustrated in EvacU Elite Installation, Commissioning and User Manual MAN3137.

## 3. Installation

a. Turn power OFF to the Universal Rack. Use the **EWCIE Power Switch** on the Primary PSU.

b. Set the node address number dipswitch on the NIC.

c. Observing anti-static precautions install the DCPU+NIC within the panel into Rack 1 slot 0 and 1.

d. The NIC and any DCPU configuration will need to be configured in the system to provide functionality*.

e. Fit the appropriate internal cables E.g., DCPU RJ45 1 to GUI Cat 5.

f. Ensure the correct SFP Module types are fitted and connected between the nodes and match the network loop cabling types installed.

g. Fit all the cards into the universal rack slots correctly as per the configuration slot positions.

h. Fit the rack cover plates which prevent dislodgement of all cards in the rack.

i. Turn power ON to the Universal Rack. Use the **EWCIE Power Switch** on the Primary PSU.

For Item D Please refer to the **Programming Manual** MAN3142