# Datasheet

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## L0V42101 Pempek OBP 2 Processor Module

The L0V42101 is a "drop-in replacement" upgrade for traditional Pempek OBP processor modules already operating in a machine.  A dual processor architecture supports Pempek OBP 2 features – whilst retaining the reliable machine automation of the original Pempek OBP machine software. The second processor is dedicated to remote access, telemetry and configuration management (Edison Tool Box PC software required).

The L0V42101 is an Pempek OBP 2 Mining PLC Processor module ideal for legacy mobile mining machinery control and automation applications that are programmed and maintained by Pempek automation software developers.

 A fully AS4871-compliant internal battery preserves parameter memory and real-time clock functionality when mains machine power is removed.
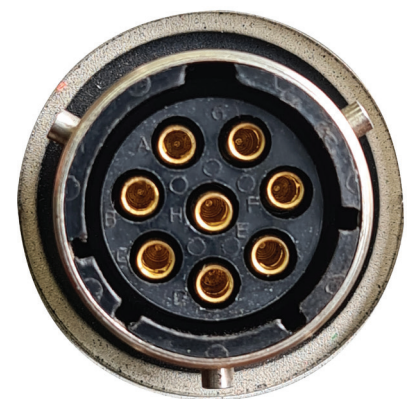
In addition to sixteen (16) local digital inputs (24VDC); the module provides a number of field bus options - including CAN (4), RS-422 (3) and RS-232 (1).



- **Module Type:**  Processor Module
- **Supply Input:**  24VDC (+/- 10%) /  5 Watts (Max)
- **Data Communications:**  CAN (4), RS-422 (3), RS-232 (2)
- **Operating Temperature:** -20$^{\circ C}$ to 70$^{\circ C}$
- **Inputs:**  16 x Digital Inputs (24VDC)
- **Outputs:** 1 x C-Form Relay (110VAC / 8 A)
- **Connector 1:** Pempek OBP A2 (24VDC  Input + CAN Bus A)
- **Connector 2:** 2 x M12 Ethernet, Ethernet 1 = Remote Access, Ethernet 2 = Local Network
- **Connector 3:** Pempek OBP Data A68 (CAN B,C,D, RS422, RS232)
- **Connector 4:** Pempek OBP A69 (Digital Inputs, Relay Output)

## CONNECTOR A2

| PIN | Connector A2 Burndy Female 8 Way | Signal |
|-----|----------------------------------|--------|
| A2-A | Supply Input | 24VDC Supply Input |
| A2-B | Supply Input | 0VDC Supply Input |
| A2-C | CAN A (Positive) | Communications |
| A2-D | CAN A (Positive) | Communications |
| A2-E | CAN A (Negative) | Communications |
| A2-F | CAN A (Negative) | Communications |
| A2-G | Termination Link 1 - 1 | Termination Link Input |
| A2-H | Termination Link 1 - 2 | Termination Link Input |

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**Dimensions (mm)**
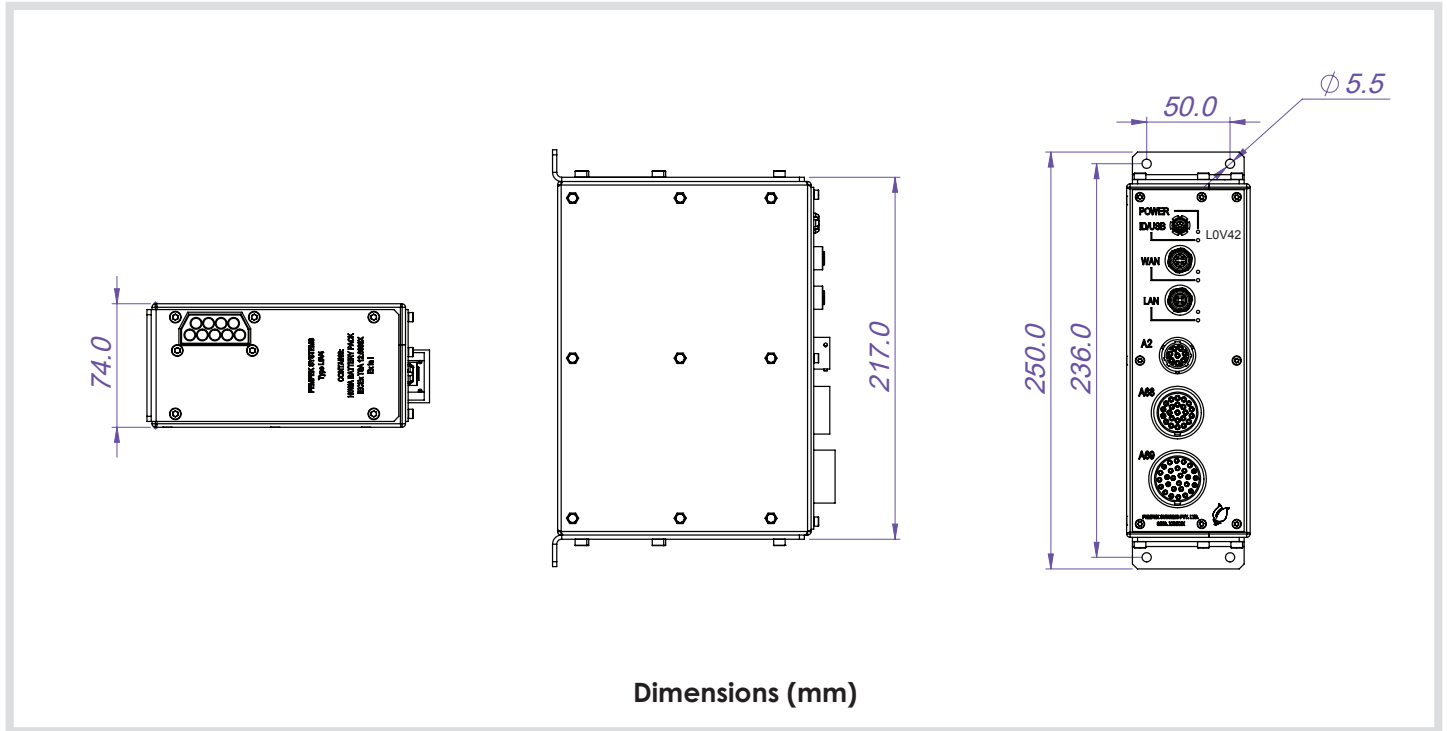
## CONNECTOR A68

| No. | Connector A68 23 (32) Burndy Female PIN | Name |
|-----|------------------------------------------|------|
| 1 | A | CANH1 |
| 2 | B | CANL1 |
| 3 | C | CANH2 |
| 4 | D | CANL2 |
| 5 | E | CANH3 |
| 6 | F | CANL3 |
| 7 | G | 0VDC |
| 8 | H | RXA- |
| 9 | J | RXA+ |
| 10 | K | TXA- |
| 11 | L | TXA+ |
| 12 | M | RXB- /CTSB |
| 13 | N | RXB+ /RXB |
| 14 | P | TXB- / TXB |
| 15 | R | TXB+/RTSB |
| 16 | S | 0VDC |
| 17 | T | RXC- |
| 18 | U | RXC+ |
| 19 | V | TXC- |
| 20 | W | TXC+ |
| 21 | X | RXD |
| 22 | Y | TXD |
| 23 | Z | 0VDC |

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## CONNECTOR A69

| No. | Connector A69 28 (41) Burndy Female PIN | Name |
|---|---|---|
| 1 | A | DGI-1 |
| 2 | B | DGI-2 |
| 3 | C | DGI-3 |
| 4 | D | DGI-4 |
| 5 | E | DGI-5 |
| 6 | F | DGI-6 |
| 7 | G | DGI-7 |
| 8 | H | DGI-8 |
| 9 | J | DGI-9 |
| 10 | K | DGI-10 |
| 11 | L | DGI-11 |
| 12 | M | DGI-12 |
| 13 | N | DGI-13 |
| 14 | P | DGI-14 |
| 15 | R | DGI-15 |
| 16 | S | DGI-16 |
| 17 | T | 0VDC |
| 18 | U | CAN 1-L1 |
| 19 | V | CAN 1-L2 |
| 24 | a | CAN 2-L1 |
| 25 | b | CAN 2-L2 |
| 26 | c | RELAY IN |
| 27 | d | RELAY NC |
| 28 | e | RELAY NO |