

LOLU0101 Pempek OBP Industrial Power Supply I/O Module

The LOLU0101 Pempek OBP Mining PLC Power Supply combines a mining-duty industrial 24-volt D.C. power supply with a mixture of useful input and output resources.

The power supply takes a 110-volt A.C. Input and provides stable 24-volt D.C. output (up to 75 watts) for supplying other control system modules.

An industry-standard CAN (Controller Area Network) connection is used to allow a host PLC to control relay outputs, read inputs and monitor module status.

Uniquely Keyed Type A connectors to prevent incorrect machine installation.

Module Type:

Power Supply + I/O (Relays Analog Inputs / Digital Inputs)

Supply Input:

110VAC (+/- 15%) / 80 Watts

Supply Output: 24VDC / 75 Watts (Max, but reduced when using internal relays)

Data Communications:

Pempek OBP CAN (A5/A2) CAN 2.0B Compatible

Operating Temperature: $-20^{\circ \text{C}}$ to $85^{\circ \text{C}}$

All industrial components

Inputs 1: 8 x Digital Inputs (110VAC)

Embedded Temperature Sensor oMicroprocessor

Controlled Sampling

Inputs 2: 8 x Analog Inputs (4-20 mA) Embedded Temperature Sensor oMicroprocessor Controlled Sampling

Output 1: "Pilot Relay" C-Form (NC/NO) (110V / 8A)

Output 2: "Stop Relay" A-Form (NO) (110V / 8A)

Output 3: 2 x A-Form Dual-Relay Series Outputs (with internal voltage monitoring for safety (rated to 16A @ 110VAC)

Output 4: 4 x A-Form Single-Relay Outputs (rated to 16A @ 110VAC)

Connector 1: Pempek OBP A5 (24VDC Output + CAN Bus)

Connector 2: Pempek OBP A13 (110VAC Input + Relay Outputs)

Connector 3: Pempek OBP A7 (Relay Outputs + Analog Inputs + Digital Inputs)



Heavy Duty Enclosure

Enclosure is Electroless nickel plated mild steel. Facia is stainless steel. Mounting brackets are stainless steel.

Fasteners

M5 x 10mm x 4 M4 x 10mm x 8 M3 x 10mm x 12

Mass

4.5kg (10.1lb)

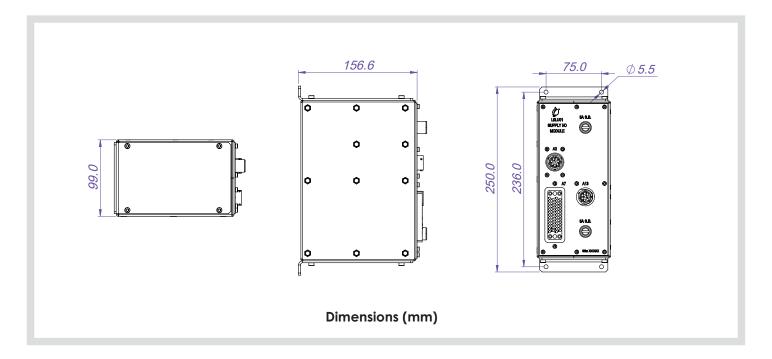
Typical Application

- Continuous Bolter/Miners
- Continuous Haulage
- Long Wall Shearers
- Mobile Bolters
- Mobile Roof Supports
- Remote Control Scoops
- Remote Control Loaders
- Any industrial switching application

Datasheet-L0LU0101



LOLU0101 Pempek OBP Industrial Power Supply I/O Module



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



CONNECTOR A13

PIN	Connector A13 Burndy Male 8 Way	Signal
A2-A	110VAC Active Supply Input	110VAC Active Input
A2-B	110VAC Neutral Supply Input	110VAC Neutral Input
A2-C	Pilot Relay Input	Voltage Free
A2-D	Pliot Relay Output (N/C) Voltage Free Contacts	Voltage Free
A2-E	Pliot Relay Output (N/O) Voltage Free Contacts	Voltage Free
A2-F	Control Relay Input	110VAC Active Input
A2-G	Control Relay Output (N/O)	110VAC Output
A2-H	Control Relay Reference	110VAC Neutral Input



Datasheet-L0LU0101

www.pempek.world | sales@pempek.world | 3/13 Hoyle Ave Castle Hill NSW 2154 | +61 02 8853 4800

Pempek Systems Pty Ltd ACN 622 172 721 (Pempek) is the owner of all intellectual property rights subsisting in all of its products, software and hardware, as well as all product information contained in this document (including without limitation in respect of all copyright, designs and know-how). Your use of Pempek's products and intellectual property is strictly subject to: Pempek's Licence Terms and Conditions, which are accessible here: https://pempek.world/terms-and-conditions/#PempekIntellectualPropertyLicenceAgreement



LOLU0101 Pempek OBP Industrial Power Supply I/O Module

CONNECTOR A7

© Pempek 1985 – 2024

PIN	Connector A7 V35 Female 34 Way	Signal
A7-A	-	-
A7-B	Relay 1 Input	110VAC Input
A7-C	Analog Input 8	4-20mA Input
A7-D	Analog Reference Supply	Supply Output
A7-E	Analog Input 7	4-20mA Input
A7-F	Relay 1 Output	110VAC Output
А7-Н	Analog Input 7	4-20mA Input
A7-J	-	-
A7-K	Analog Input 5	4-20mA Input
A7-L	Relay 2 Input	110VAC Input
A7-M	Analog Input 4	4-20mA Input
A7-N	-	-
A7-P	Analog Input 3	4-20mA Input
A7-R	Relay 2 Output	
A7-S	Analog Input 2	4-20mA Input
A7-T	-	
A7-U	Analog Input 1	4-20mA Input
A7-V	Relay 3 Input	110VAC Input
A7-W	-	-
A7-X	-	-
A7-Y	-	-
A7-Z	Relay 3 Output	110VAC Output
A7-a	-	-
A7-b	-	-
A7-c	-	-
A7-d	Relay 4 Input	110VAC Input
А7-е	Digital Input Reference (Inputs 14)	110VAC Neutral Input
A7-f	-	-
A7-h	Digital Input Reference (Inputs 58)	110VAC Neutral Input
A7-j	Relay 4 Output	110VAC Output
A7-k	Relay Output Reference (Outputs 36)	
A7-m	-	-
A7-n	Relay Output Reference (Outputs 12)	
А7-р	Relay Input 5	110VAC Input
A7-r	Digital Input 1	110VAC Input
A7-s	-	-
A7-†	Digital Input 2	110VAC Input
A7-u	Relay Output 5	110VAC Output
A7-v	Digital Input 3	110VAC Input
A7-w	-	-
A7-x	Digital Input 4	110VAC Input
A7-y	Relay Input 6	110VAC Input
A7-z	Digital Input 5	110VAC Input
A7-AA	-	-
A7-BB	Digital Input 6	110VAC Input
A7-CC	Relay Output 6	110VAC Output
A7-DD	Digital Input 7	110VAC Input
A7-EE		-
A7-FF	Digital Input 8	110VAC Input
A7-HH	-	<u>.</u>
, W 1111		





Image depict coding pins required

Datasheet-L0LU0101

Datasheet



LOLU0101 Pempek OBP Industrial Power Supply I/O Module

Part Number	Description
H0L90201	Connector Assembly A5
H0LU0101	Connector Assembly A7
H0LU0201	Connector Assembly A13

Connector Assembly Specifications

- Product Type: Pre-manufactured cable assembly
- Construction: Connector with flying leads (pigtail)
- HOL90201 Connector 1: Pempek OBP A5 Male Plug (8-pin)
- HOLU0201 Connector 1: Pempek OBP A13 Female Plug
- HOLU0101 Connector 1: Pempek OBP A7 Male Plug (50-pin)
- Connector 2: Unterminated, flying leads
- Conductors: 8
- H0LU0101 Conductors: 34
- Cable Length: 2.2 m
- **Pin Type:** Female (Gold-plated)
- Conductor Type: PVDF Tinned Stranded Wire
- **Insulation Rating: 600 volts**
- **Temperature Rating:** $-65^{\circ \text{C}}$ to $105^{\circ \text{C}}$
- **Recommended Tools:** PVDF / Teflon Insulation Stripping Tool