The LOPE0101 Pempek OBP Mining PLC Solenoid Driver Module provides PWM - controlled proportional outputs in a compact, robust form factor that is well suited to mobile mining applications.

The industry-standard CAN (Controller Area Network) connection provides a host PLC with the ability to control and monitor all outputs.

Uniquely Keyed Type A and B connectors to prevent incorrect machine installation

22 x PWM current-controlled 24VDC Proportional outputs (up to 1A continuous rating)

Module Type: Multi-channel Solenoid Driver

Supply Input 1: 24VDC (+/- 10%) / 3 Watts (Max)

Supply Input 2: 24VDC (+/- 10%) / 550 Watts (Max) (based on output loads)

Data Communications: Pempek OBP CAN (A2)

**Operating Temperature:** -20°C to 70°C

Inputs: None

**Outputs:** 22 x PWM Current-regulated Outputs (1A Maximum)

Connector 1: Pempek OBP A2 (24VDC Input + CAN Bus)

Connector 2: Pempek OBP A30 (PWM Outputs and 24VDC PWM Supply Input)

Connector 3: Pempek OBP B30 (PWM Outputs and 24VDC PWM Supply Input)

#### Heavy Duty Enclosure:

Electros Nickel Plated Rugged Construction

#### **Fasteners**

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

Mass

3.5kg (7.7lb)



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### Typical Applications

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

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#### **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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### **CONNECTOR A30**

Number	Unit / PCB V-35 Female Board Mount PIN	Name
1	А	Solenoid 11 Positive
2	В	Solenoid 10 Positive
3	С	Solenoid 11 Negative
4	D	Solenoid 10 Negative
5	E	CAN Address 2
6	F	Solenoid 9 Positive
7	Н	CAN Address 1
8	J	Solenoid 9 Negative
9	К	CAN Address 0
10	L	Solenoid 8 Positive
11	Μ	RS232 Tx Out
12	Ν	Solenoid 8 Negative
13	Р	RS232 Rx In
14	R	Solenoid 7 Negative
15	S	SCI BOOT (0VDC for Serial Boot Mode)
16	Т	Solenoid 7 Positive
17	U	Solenoid 1 Positive
18	V	Solenoid 6 Negative
19	W	Solenoid 1 Negative
20	Х	Solenoid 6 Positive
21	Y	Solenoid 2 Positive
22	Z	Solenoid 5 Negative
23	AA	Solenoid 2 Negative
24	BB	Solenoid 5 Positive
25	СС	Solenoid 3 Positive
26	DD	Solenoid 4 Negative
27	EE	Solenoid 3 Negative
28	FF	Solenoid 4 Positive
29	НН	24V SOLENOID SUPPLY
30	JJ	OV SOLENOID SUPPLY
31	KK	24 SOLENOID SUPPLY
32	LL	OV SOLENOID SUPPLY
33	MM	24V SOLENOID SUPPLY
34	NN	OV SOLENOID SUPPLY





Image depict coding pins required

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### **CONNECTOR B30**

Number	Unit / PCB VMCT-34F Female Board Mount PIN	Name
1	А	Solenoid 22 Positive
2	В	Solenoid 21 Positive
3	С	Solenoid 22 Negative
4	D	Solenoid 21 Negative
5	E	CAN Address Modifier 2
6	F	Solenoid 20 Positive
7	н	CAN Address Modifier 1
8	J	Solenoid 20 Negative
9	К	CAN Address Modifier 0
10	L	Solenoid 19 Positive
11	М	RS-232 Transmit
12	Ν	Solenoid 19 Negative
13	Р	RS-232 Receive
14	R	Solenoid 18 Negative
15	S	RS-232 0VDC Reference
16	Т	Solenoid 18 Positive
17	U	Solenoid 12 Positive
18	V	Solenoid 17 Negative
19	W	Solenoid 12 Negative
20	Х	Solenoid 17 Positive
21	Υ	Solenoid 13 Positive
22	Z	Solenoid 16 Negative
23	AA	Solenoid 13 Negative
24	BB	Solenoid 16 Positive
25	CC	Solenoid 14 Positive
26	DD	Solenoid 15 Negative
27	EE	Solenoid 14 Negative
28	FF	Solenoid 15 Positive
29	HH	Solenoid Supply 24VDC
30	JJ	Solenoid Supply OVDC
31	KK	Solenoid Supply 24VDC
32	LL	Solenoid Supply OVDC
33	MM	Solenoid Supply 24VDC
34	NN	Solenoid Supply 0VDC





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# **Connector Assembly**

Part Number	Description
H0PE0401	Connector Assembly A30
H0PE0501	Connector Assembly B30

# **Connector Assembly Specifications**

- Product Type: Pre-manufactured cable assembly
- Construction: Connector with flying leads (pigtail)
- HOPE0401 Connector 1 : Pempek OBP A30 Male Plug (34-pin)
- HOPE0501 Connector 1 : Pempek OBP B30 Male Plug (34-pin)
- Connector 2: Unterminated, flying leads
- Conductors: 26
- Cable Length: 2.2 metres
- Pin Type: Female (Gold-plated)
- Conductor Type: PVDF Tinned Stranded Wire
- Insulation Rating: 600 volts
- Temperature Rating: -65°C to 105°C
- Recommended Tools: PVDF / Teflon Insulation Stripping Tool

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