

L0LU0401 Obelix Industrial Power Supply I/O Module 24VDC Digitals Inputs Type A

The L0LU Obelix 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:

Obelix CAN (A5/A2)
CAN 2.0B Compatible

Operating Temperature: -20°C to 85°C

All industrial components

Inputs 1: 8 x Digital Inputs (24VDC)

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: Obelix A5 (24VDC Output + CAN Bus)

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

Connector 3: Obelix A7 (Relay Outputs + Analog



Material

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

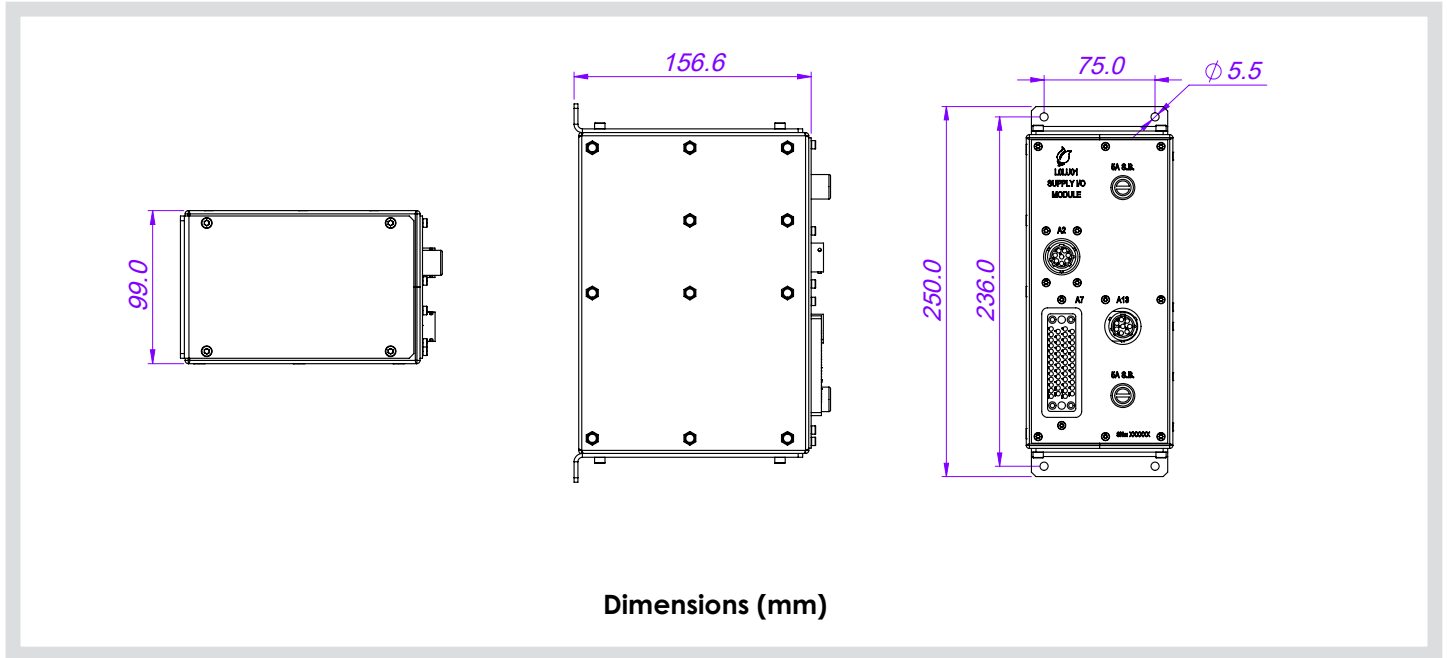
Mass

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

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Dimensions (mm)

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) <small>Voltage Free Contacts</small>	Voltage Free
A2-E	Pliot Relay Output (N/O) <small>Voltage Free Contacts</small>	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



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CONNECTOR A7

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
A7-H	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
A7-e	Digital Input Reference (Inputs 1..4)	0VDC
A7-f	-	-
A7-h	Digital Input Reference (Inputs 5..8)	0VDC
A7-j	Relay 4 Output	110VAC Output
A7-k	Relay Output Reference (Outputs 3..6)	-
A7-m	-	-
A7-n	Relay Output Reference (Outputs 1..2)	-
A7-p	Relay Input 5	110VAC Input
A7-r	Digital Input 1	24VDC
A7-s	-	-
A7-t	Digital Input 2	24VDC
A7-u	Relay Output 5	110VAC Output
A7-v	Digital Input 3	24VDC
A7-w	-	-
A7-x	Digital Input 4	24VDC
A7-y	Relay Input 6	110VAC Input
A7-z	Digital Input 5	24VDC
A7-AA	-	-
A7-BB	Digital Input 6	24VDC
A7-CC	Relay Output 6	110VAC Output
A7-DD	Digital Input 7	24VDC
A7-EE	-	-
A7-FF	Digital Input 8	24VDC
A7-HH	-	-

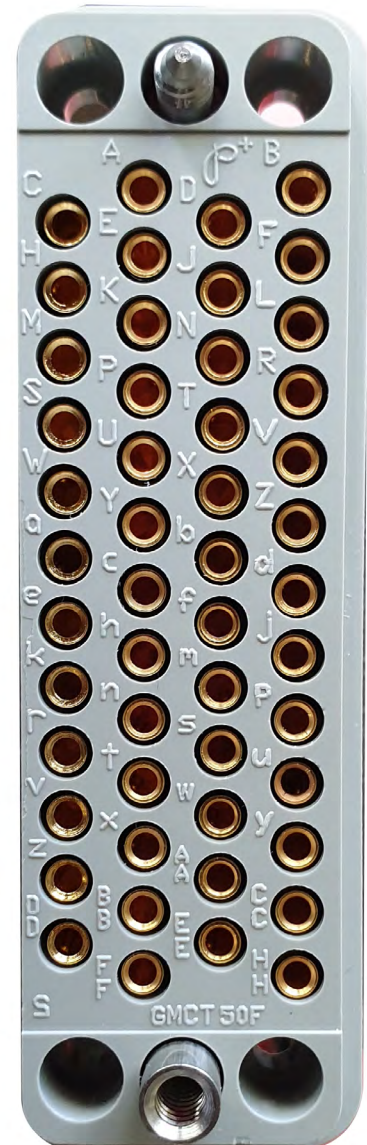


Image depict coding pins required

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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)
- **H0L90201 Connector 1:** Obelix A5 Male Plug (8-pin)
- **H0LU0201 Connector 1:** Obelix A13 Female Plug (8-pin)
- **H0LU0101 Connector 1:** Obelix 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°C to 105°C
- **Recommended Tools:** PVDF / Teflon Insulation Stripping Tool