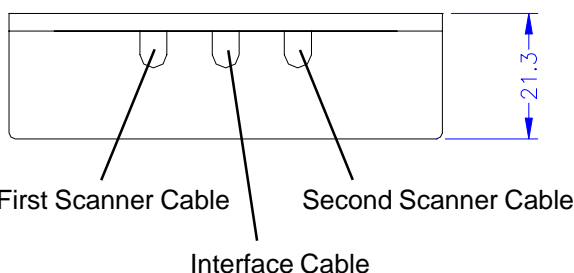
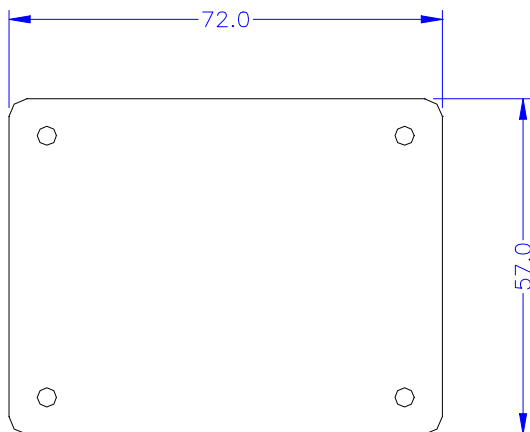




Pressure Scanner Interface and Power Supply

Self contained power supply and interface for the ESP HD series pressure scanners

- **High quality power supply for ESP Electronic pressure scanners.**
- **Can be used in Wind tunnel and on-car applications.**
- **Includes TTL to CMOS level shifting for address lines.**
- **Runs two scanners.**
- **Independent excitation supplies to remove cross talk.**
- **Supplied with Pressure Systems scanner cable and miniature 'D' type terminations.**
- **Potted in anodised aluminium case for reliability.**
- **Comes with Lemo interface connector as standard.**



The Chell ScanPSU is an interface that facilitates the connection of the Pressure Systems ESP scanners to third party acquisition systems. The interface accepts a single DC supply and provides the +/- 12 and 5 volt scanner supplies.

All supplies are high stability and low noise and in addition to this, two discrete supplies are used for the 5 volt excitation for the two scanners to remove any cross talk. This allows scanners to be removed or replaced without invalidating the calibrations.

The interface includes the level shifting electronics to adapt open collector, 5 or 12 volt logic to the CMOS levels that the scanners use.

The power supply is housed in an aluminium case and is potted to provide increased reliability in harsh vibration environments.

The ScanPSU is supplied with screened cabling and connectors for plugging directly into the scanners. The interface connector is a LEMO 2B series as standard although it can be supplied to suit any application.

Specifications

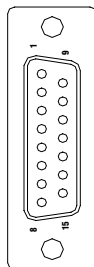
Parameter	ScanPSU
Input supply voltage	9-36 VDC @ 15VA
Dimensions	72mm x 57mm x 21.3mm
Operating temperature range	+5 to+70°C
Storage temperature range	-20 to+70°C
Maximum relative humidity	95% at 50°C (non-condensing)
Output supplies	
5 Volt (+Vs) current rating	100mA for each scanner (separate supplies)
5 Volt (+Vs) ripple	<30mV
5 Volt (+Vs) load regulation	<2mV
5 Volt (+Vs) line regulation (over 9 to 36 volt input)	<2mV
5 Volt (+Vs) temperature coefficient	+/- 0.005%FS/°C
+12 Volt current rating	200mA
+12 Volt ripple	<90mV
+12 Volt load regulation	<0.1V
+12 Volt line regulation (over 9 to 36 volt input)	<20mV
+12 Volt temperature coefficient	+/- 0.0017%FS/°C
-12 Volt current rating	200mA
-12 Volt ripple	<40mV
-12 Volt load regulation	<0.2V
-12 Volt line regulation (over 9 to 36 volt input)	<20mV
-12 Volt temperature coefficient	+/- 0.0017%FS/°C
Address Lines	
Input	Configurable as open collector or 5-12 volt logic.
Output	8.77 Volts

Connectors

Scanner

Type : Miniature 'D' 15 way, male.

- 1 - Address 0
- 2 - Address 1
- 3 - Address 2
- 4 - Address 3
- 5 - Address 4
- 6 - +12VDC
- 7 - -12VDC
- 8 - Vs
- 9 - Vs_r
- 10 - GND
- 11 - Output
- 12 - Address 5
- 13 - Not used
- 14 - Not used
- 15 - Temperature output.*



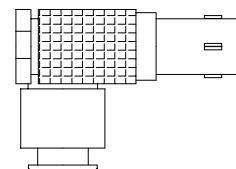
Interface

LEMO
FHB.2B.319.CLAD52

- 1 - 24 Volt supply
- 2 - Power GND
- 3 - Address 0
- 4 - Address 2
- 5 - Address 4
- 6 - Output 0 GND
- 7 - Output 0 GND
- 8 - +Vs sense 0*
- 9 - Output 0
- 10 - Not used
- 11 - Output 1 GND
- 12 - Output 1 GND
- 13 - +Vs sense 1*
- 14 - Output 1
- 15 - Not used

- 16 - Address 1
- 17 - Address 3
- 18 - Address 5
- 19 - Screen

*NOTE: Temperature output signals can be accommodated, either by replacing the Vs sense lines or using a larger connector.



Chell Instruments Ltd
Folgate House
Folgate Road
North Walsham
Norfolk NR28 0AJ
England

Tel.: +44 (0)1692 500555
Fax: +44 (0)1692 500088

E-mail : sales@chell.co.uk

Web site : www.chell.co.uk