Hardware Installation Guide
Draft – Subject to Change

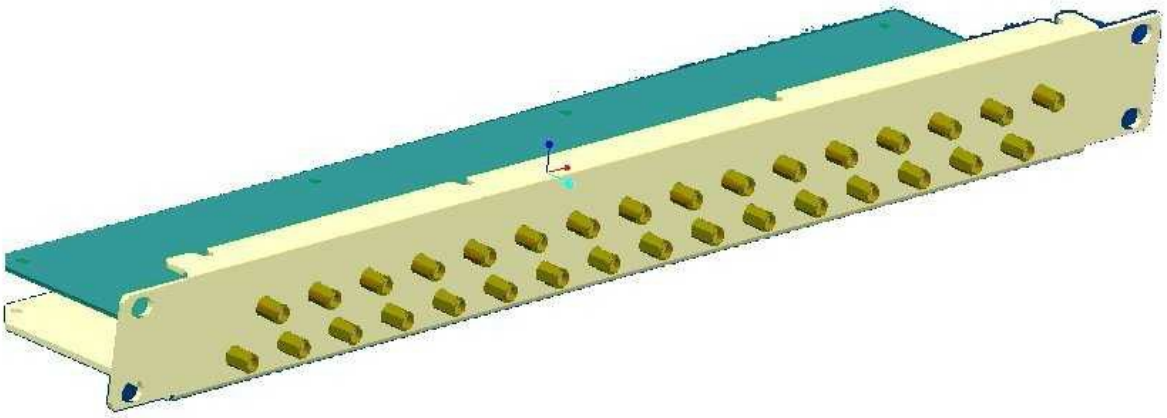
LEMOPANEL-32-3
Front Panel for 3-pin Lemo Connectors

1 Overview

LEMOPANEL-32-3 is a 1U, 19” rack-mountable breakout panel for ACQ196CPCI, accepting 32 channels using 3-pin Lemo Connectors. It includes Transil transient over-voltage protection.

2 Front Panel Connectors

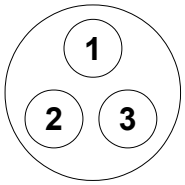
LEMOPANEL-32-3 uses LEMO EPG.0B.303.HLN connectors. Mating connectors should be compatible with this part.



It is common practice for customers to manufacture their own cables to fit in with their own sensor requirements. The following sections explain each connector configuration.

2.1 Front Panel Connector Pinout

Each channel has the following pinout.

Pin	*Name*	*Notes*	 *LEMOPANEL Channel Pinout*
1	TBC	TBC	
2	Analogue Input -		
3	Analogue Input +		

3 Rear Connectors

LEMOPANEL-32-3 Rear Connector

It is common practice for customers to manufacture their own cables to fit in with their own sensor requirements. The following sections explains each connector configuration.

D–TACQ Solutions supply a standard range of cables and can also produce custom solutions. LEMOPANEL-32-3 may be used with standard compatible cables such as L-COM CA900MM-2M.

3.1 Rear Connector Pinout

3.1.1 Channels 1-32

This connector is installed for LEMOPANELs to be used with ACQ196CPCI.

Pin No.	***Signal***	***Pin No.***	***Signal***
1	0V	35	0V
2	0V	36	0V
3	Analog In 1+	37	Analog In 1-
4	Analog In 2+	38	Analog In 2-
5	Analog In 3+	39	Analog In 3-
6	Analog In 4+	40	Analog In 4-
7	Analog In 5+	41	Analog In 5-
8	Analog In 6+	42	Analog In 6-
9	Analog In 7+	43	Analog In 7-
10	Analog In 8+	44	Analog In 8-
11	Analog In 9+	45	Analog In 9-
12	Analog In 10+	46	Analog In 10-
13	Analog In 11+	47	Analog In 11-
14	Analog In 12+	48	Analog In 12-
15	Analog In 13+	49	Analog In 13-
16	Analog In 14+	50	Analog In 14-
17	Analog In 15+	51	Analog In 15-
18	Analog In 16+	52	Analog In 16-
19	Analog In 17+	53	Analog In 17-
20	Analog In 18+	54	Analog In 18-
21	Analog In 19+	55	Analog In 19-
22	Analog In 20+	56	Analog In 20-
23	Analog In 21+	57	Analog In 21-
24	Analog In 22+	58	Analog In 22-
25	Analog In 23+	59	Analog In 23-
26	Analog In 24+	60	Analog In 24-
27	Analog In 25+	61	Analog In 25-
28	Analog In 26+	62	Analog In 26-
29	Analog In 27+	63	Analog In 27-
30	Analog In 28+	64	Analog In 28-
31	Analog In 29+	65	Analog In 29-
32	Analog In 30+	66	Analog In 30-
33	Analog In 31+	67	Analog In 31-
34	Analog In 32+	68	Analog In 32-

Matching connector type is 68 way male Micro D (SCSI-II Type) with 4-40 screw. Cable can be 68 way ribbon or, preferably, 34 sheathed wire pairs.

4 Jumpers

LEMOPANEL-32-3 can be configured to route the signal and shield ground connections from the rear SCSI-68 connectors in several different ways.

The jumpers are all located next to the SCSI-68 connectors and the following is a description and diagram of their settings and locations.

Jumpers	*Setting*	*Description*	*Symbol*
JP1	1 (Fit)	Connect signal ground from SCSI-68 to LEMOPANEL Analogue ground.	
	0	Float signal ground.	
JP2	1 (Fit)	Connect SCSI-68 connector shield to LEMOPANEL Analogue ground.	
	0	Float SCSI-68 connector shield.	
JP3	1 (Fit)	Connect SCSI-68 connector shield to LEMOPANEL Chassis ground.	
	0	Float SCSI-68 connector shield.	
JP4	1 (Fit)	Connect LEMO shield to LEMOPANEL Chassis ground.	
	0	Float LEMO shield.	
JP5	1 (Fit)	Connect LEMO shield to LEMOPANEL Analogue ground.	
	0	Float LEMO shield.	

5 Specification

This describes the ESD protection and other specifications provided by LEMOPANEL-32-3[1].

	Value			***Units***	***Condition***
	Min.	***Nom.***	***Max.***		
Nominal Input Voltage	-10		+10	V	
ESD Protection Voltage		8		kV	Contact
ESD Protection Voltage		15		kV	Air
Peak ESD Pulse Power		400		W	10/1000µs
Peak ESD Pulse Power		2.3		kW	8/20µs
Shield Coupling Capacitance		0.01		µF	To Chassis Ground
Shield Coupling Voltage			200	V	

1 http://www.st.com/internet/com/TECHNICAL_RESOURCES/TECHNICAL_LITERATURE/DATASHEET/CD00001333.pdf