SLICE PRO Field

Portable Enclosure Assembly with AC/DC Power Support for SLICE PRO DAS

The SLICE PRO Field portable DAS system includes a SLICE PRO Field enclosure assembly, an AC power input cord, a PPS power cable (P/N 10600-00122), a DPP power cable (P/N 10600-00050), an REC PC-to-DAS comm cable (P/N 10700-00150), and a key. A DPX cable (P/N 10600-00060) and cable-side COM LEMO (P/N 80000-02098) is also included for use in adapting the system to any unique testing requirements. A canvas bag containing some items is found under the lid and other items are in additional plastic bags. The lid is removable for ease of use. Your system may also include SLICE PRO DAS; please see your packing slip for your DAS specifications and the SLICE PRO SIM and SLICE PRO Ethernet Controller User's Manuals for detailed operational information.

Case dimensions: 17.5 W x 9.75 D x 8.75" H
Weight: 22.5 lbs (10.2 kg) (includes DAS and cables)

Powering the SLICE PRO Field System

External power is used to 1) charge all SLICE PRO batteries (Ethernet Controller and SLICE PRO modules) when system power is off, or 2) simultaneously charge and run a SLICE PRO system when system power is on. If input power fails, each unit in the SLICE PRO system will transition to its own internal battery. (When fully charged, battery capacity is sufficient to provide primary power and sustain full operation for 30-60 minutes depending on sensor load.)

Input Power	Available Output Power	Uses
AC INPUT[1] (97-134 VAC, 47-800 Hz)	DC OUTPUT (28 V)	DC INPUT (9-36 V)
DC INPUT (9-36 V)	15 VDC OUT (3.5 A)	SLICE PRO DAS
	15 VDC OUT (1.25 A + 1.25 A)	Auxiliary equipment

External power provided via the AC INPUT connector is converted[1] to 28 VDC output power and is available via the DC OUTPUT (28 V) connector. When the LED is green, output power is active and available.

Output power from the DC OUTPUT (28 V) connector can be provided to the DC INPUT (9-36 V) connector by using a DPP cable (P/N 10600-0005x).

Input power ($\geq$125 W) provided to the DC INPUT (9-36 V) connector is converted to 15 VDC output power and is available via the three 15 VDC OUT connectors. When the LED is green, output power is active and available. (The DPX cable (P/N 10600-00060) included with the system can be used to provide 9-36 VDC input power from an alternate external source, as required by your test environment.)

Typically, input power to the DAS is provided via the 15 VDC OUT (3.5 A) connector and a PPS cable (P/N 10600-0012x) connected to the PWR connector on the SLICE PRO Ethernet Controller.

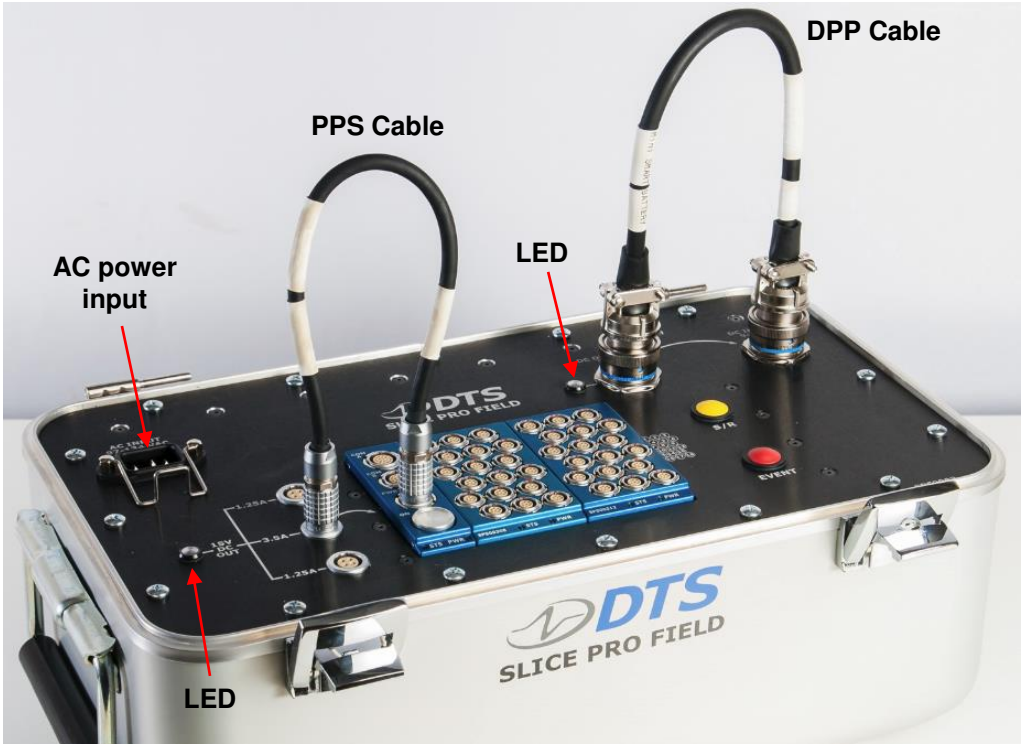
WARNING:

Due to battery chemistry, do not operate SLICE PRO DAS at temperatures below 0°C (32°F) or in excess of 60°C (140°F).

Power LEDs

There are two LEDs available that provide output power status: DC OUTPUT (28 V) and 15 VDC OUT. When the LED is green, the output power is active and available.

[1] The SLICE PRO Field contains an airborne-rated AC/DC power supply that meets both RTCA/DO-160G, section 16 and Airbus ABD0100.1.8 issue D for power factor and input current harmonic distortion levels over the 360 Hz-800 Hz operating range. Input range = 97 Vrms – 134 Vrms, 47–800 Hz.



Push Button Switches

	
Momentary; sends Start Record signal to DAS	Momentary, sends Event signal to DAS

Communications

PC-to-DAS communications are supported via an REC cable (P/N 10700-0015x) using either COM port on the SLICE PRO Ethernet Controller. (The COM connectors are functionally identical.) A low-profile piezo switch is used for on/off control. (There is no detectable movement in the switch; you must press and hold firmly for 2 seconds to start or stop the system.) Communication is enabled after the initialization sequence has completed. (The PWR LED on the Ethernet Controller will blink blue when the system is initializing and go solid blue when ready.) Total time from ON initiation to system ready is typically between 1-2 minutes.

The 19-pin LEMO connector included with the system can be used in the open COM port for event input, remote on, start record input, and status signals, as required by your test environment. Please see the SLICE PRO Ethernet Controller User's Manual for implementation specifics.

Connector Information and Pin Assignments

DC OUTPUT, 28 V
(Amphenol MS3474L14-4S)

(panel view)

Suggested cable connector P/N:
MS3476L14-4P/97-3057-1008-1

Pin	Function
A	+ VDC output
B	No connection
C	- VDC output (power return)
D	Enclosure (case ground)

DC INPUT, 9-36 V
(Amphenol MS3474L14-4P)

(panel view)

Suggested cable connector P/N:
MS3476L14-4S/97-3057-1008-1

Pin	Function
A	+ VDC input
B	No connection
C	- VDC input (power return)
D	Enclosure (case ground)

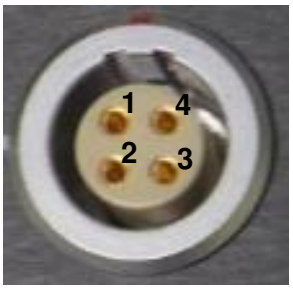
15 VDC OUT, 3.5 A
(LEMO EGG.2B.304.CLL)

(panel view)

Suggested cable connector P/N:
FGG.2B.304.CLADxx*

Pin	Function
1	+ VDC output
2	- VDC output
3	- VDC output
4	- VDC output

15 VDC OUT, 1.25 A
(LEMO EGA.2B.304.CLL)



(panel view)

Suggested cable connector P/N:
FGA.2B.304.CLADxx*

Pin	Function
1	+ VDC output
2	- VDC output
3	- VDC output
4	- VDC output

* xx denotes diameter of cable to be used; e.g., 52 = 5.2 mm. See www.lemo.com for more information.

Accessories/Support Equipment

10400-00060: Power supply; 15 VDC, 4 A (90-240 VAC in, LEMO term) (PS-05)
10600-0005x: Cable, power (DPP)
10600-0006x: Cable, power, DC input to pigtails (DPX)
10600-0012x: Cable, power, short grounded (PPS)
10700-0015x: Cable, PC comm, Ethernet via COM port (REC)
80000-02098: LEMO, plug, cable; 2B, 19-pin, solder, 5.2 mm collet (FGG.2B.319.CLAD52)

(x = multiple lengths available)

Revision History

Rev	Date	By	Description
0	23 June 2016	EK	Initial release. Copied Z101198-MAN dtd 23 June 2016 and removed SIM P/N reference.