

LPC 4300

Quick Reference Guide



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WARNING

Death, serious injury, or fire hazard could result from improper connection of this Instrument. Read and understand this manual before connecting this instrument. Follow all installation and operating instructions while using this instrument.

Connection of this instrument must be performed in compliance with the National Electrical Code (ANSI/NFPA 70-1996) and any additional safety requirements applicable to your installation.

Installation, operation, and maintenance of this instrument must be performed by qualified personnel only. The National Electrical Code defines a qualified person as "one familiar with the construction and operation of the equipment and the hazards involved."

DEFINITIONS

WARNING statements inform the user that certain conditions or practices could result in loss of life or physical harm.

CAUTION statements identify conditions or practices that could harm the Power Platform, its data, other equipment, or property.

NOTE statements call attention to specific information.

SYMBOLS

The following International Electrotechnical Commission (IEC) symbols are on the top and rear panel in the immediate vicinity of the referenced terminal or device:



CAUTION. Refer to accompanying documents (this manual).



ALTERNATING CURRENT. (AC) operation of the terminal or device.

SAFETY PRECAUTIONS

The following safety precautions must be followed whenever any type of connection is being made to the instrument.

- Connect the green safety (earth) ground first, before making any other connections.
- Connections must be made to the instrument first, then connect to the circuit to be monitored.
- When connecting to electric circuits or pulse initiating equipment, open their related breakers. **DO NOT** install any connection of the instrument on live power lines.
- Wear safety glasses and insulated gloves when making connections to power circuits.
- Hands, shoes and floor must be dry when making any connection to a power line.
- Make sure the unit is turned OFF before connecting probes to the rear panel.
- Before each use, inspect all cables for breaks or cracks in the insulation. Replace immediately if defective.

STATEMENT OF WARRANTY

All products of Dranetz-BMI are warranted to the original purchaser against defective material and workmanship for a period of one year from the date of delivery. Dranetz-BMI will repair or replace, at its option, all defective equipment that is returned, freight prepaid, during the warranty period. There will be no charge for repair provided there is no evidence that the equipment has been mishandled or abused. This warranty shall not apply to any defects resulting from improper or inadequate maintenance, buyer-supplied hardware/software interfacing, unauthorized modification or misuse of the equipment, operation outside of environmental specifications, or improper site preparation or maintenance.

STATEMENT OF RELIABILITY

The information in this manual has been reviewed and is believed to be entirely reliable, however, no responsibility is assumed for any inaccuracies. All material is for informational purposes only and is subject to change without prior notice.

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TRADEMARKS

Power Platform is a registered trademark of Dranetz-BMI.

INTRODUCTION

The Lockable Portable Case (LPC4300) is an optional accessory for the Power Platform 4300 (PP4300). It consists of a rugged, high impact plastic case, a voltage measurement cable assembly and a domestic 115 VAC cable assembly. The cables, case and all connections to it are waterproof and designed to meet NEMA 4X requirements. The LPC4300 allows the Power Platform 4300 to be operated and left unattended in harsh industrial environments.

NOTE: Although the case is waterproof, do not use or locate the case where it will be submerged in water. The purge valve (located on the front of the case near the handle) should always be kept tightly closed. However, under certain conditions the case may be difficult to open because of its airtight sealing characteristics. If difficulty is experienced, loosen the purge valve to equalize the air pressure inside the case. The case should then open easily. Tighten the purge valve after opening the case.

STANDARD AND OPTIONAL ACCESSORIES

The voltage measurement cable assembly provided with the LPC4300 is designed for use with the plug-on clips included with the Power Platform 4300. Additionally, the AC adapter included with the Power Platform 4300 is to be installed in the Lockable Portable Case. Current measurements require the use of the optional current transformer interface cable set. Additional plug-on clips, probes and AC adapters are available. A conventional padlock for locking the case is user-supplied.

STANDARD ACCESSORIES	
Description	Part Number
Voltage Measurement Cable Assembly	116183-G1
Domestic 115 VAC Cable Assembly	116187-G1
Quick Reference Guide, LPC4300	899036

OPTIONAL ACCESSORIES	
Description	Part Number
Current Transformer Interface Cable Set (consists of two cables)	CTIC-LPC4300
AC Adapter/Battery Charger	ACADP-LPC4300

SPECIFICATIONS	
Size	16" L x 13" W x 7" D
Weight (without PP4300)	9 lbs.
Operating Temperature Range (with PP4300)	+41 to +113 °F (+5 to +45 °C)
Operating Humidity Range (non-condensing)	10-90% RH

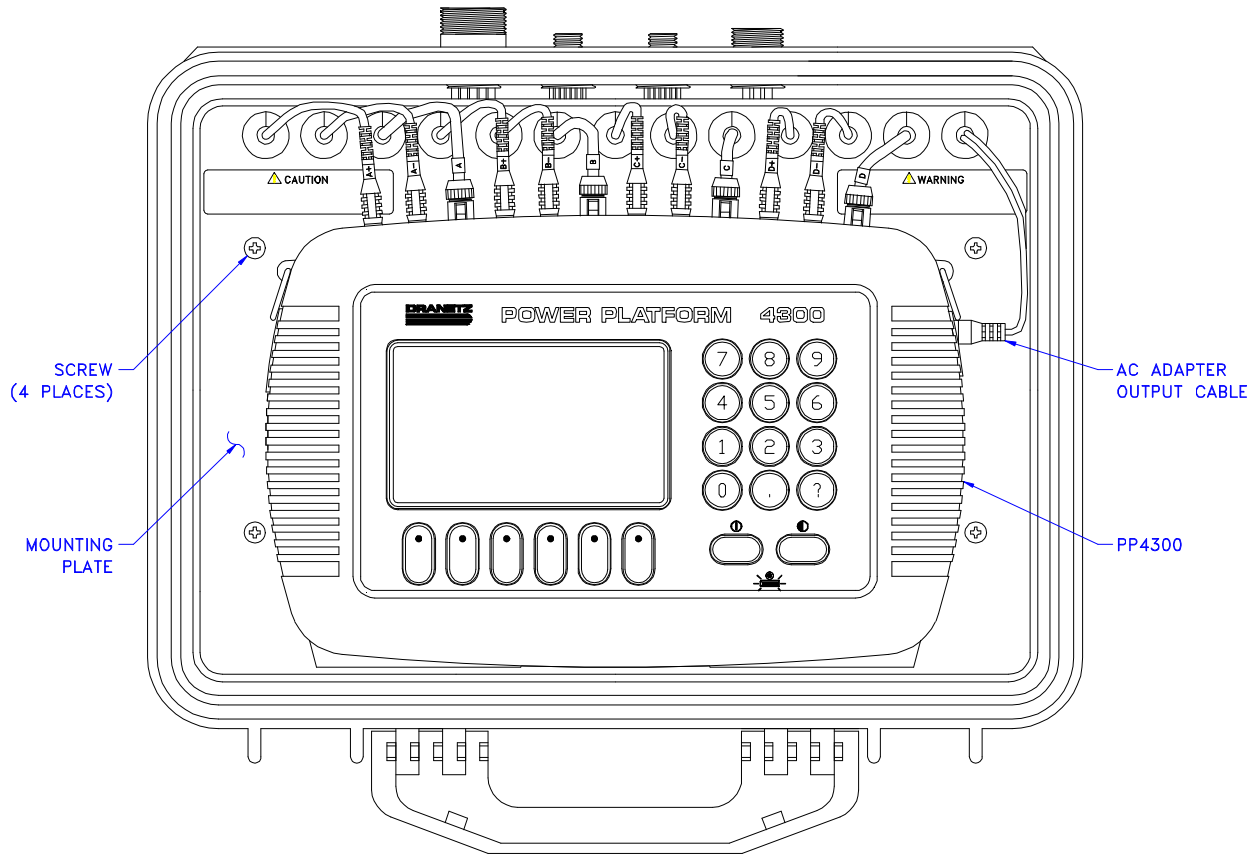


Figure 1. Lockable Portable Case with PP4300 installed (shown without lid).

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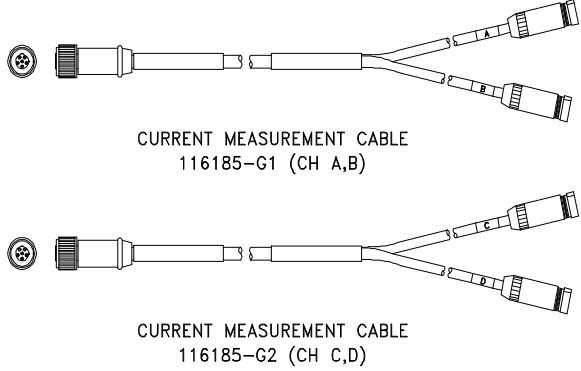
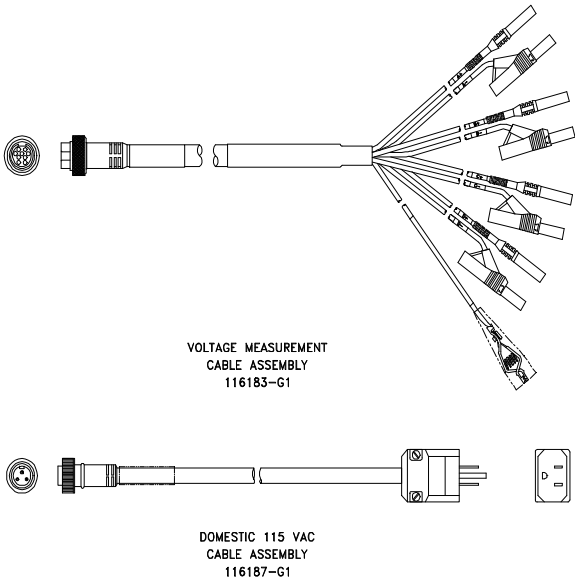


Figure 2. Standard cables provided with the LPC4300 Set.

Figure 3. Optional Current Transformer Interface Cable

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SETTING UP THE LOCKABLE PORTABLE CASE

The AC adapter must be installed inside the case prior to mounting the PP4300. Prepare the case for use as follows. Refer to Figures 1 and 4.

1. Release both latches and open the case. (See note on page 5).

WARNING
Do not remove mounting plate until all power is de-energized to all circuits.

2. Remove the four screws that retain the mounting plate. Remove the mounting plate.
3. Remove the upper piece of Velcro™ from inside the case. Expose the adhesive backing and attach it to the bottom of the AC adapter. Surface must be clean.
4. Mount the AC adapter inside the bottom of the case as shown in Figure 4.
5. Connect the internal power cable to the AC adapter.
6. Pass the AC adapter output cable through the hole in the mounting plate. If necessary, remove the grommet and install it after the cable has been positioned.
7. Install the mounting plate in the case. Be sure the internal cables are not on top of the mounting brackets. Install and tighten the four screws.
8. Position the PP4300 on the mounting plate as shown. **NOTE:** Remove the carrying strap from the PP4300 if installed.
9. Engage the two studs on the back of the PP4300 in the mounting slots in the mounting plate. Slide the PP4300 forward (toward the case handle) to secure it to the mounting plate.

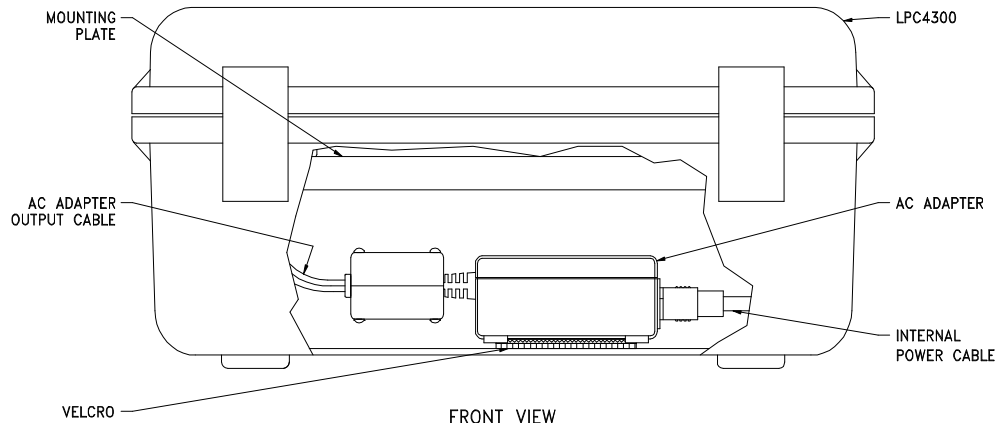


Figure 4.
Mounting AC adapter inside case.

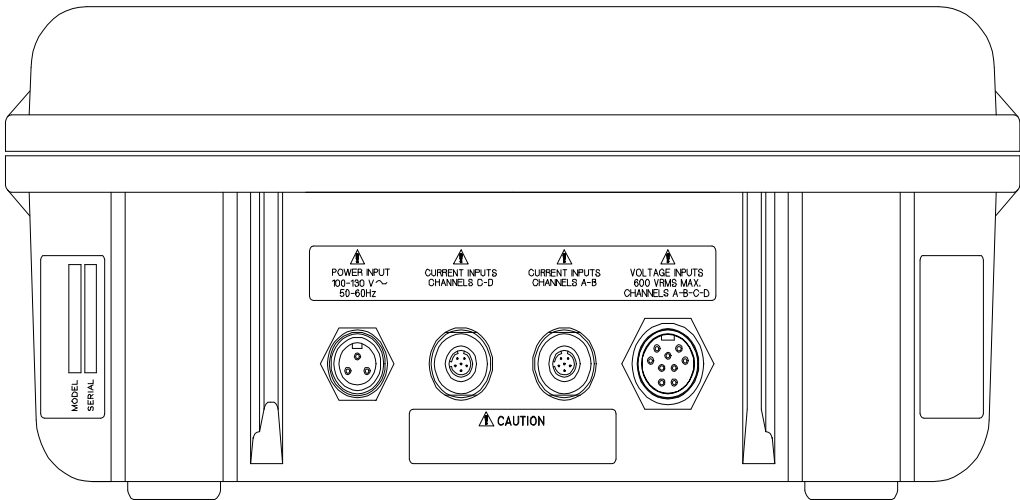
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CABLE CONNECTIONS

CAUTION

Do not connect or disconnect input cables until all power is de-energized to all circuits. Make all connections to the rear panel of the PP4300 and the LPC4300 before making any connections to the circuit to be monitored.

1. Connect the color coded and marked input cables inside the case to the rear panel of the PP4300. The cable connector sequence and color scheme on the PP4300 is identical to that of the LPC4300.
2. Connect the AC adapter output cable to the DC INPUT connector on the right side of the PP4300. See Figure 1.
3. Connect the Domestic 115 VAC Cable (P/N 116187-G1) to the rear panel of the LPC4300. The connector is marked "POWER INPUT 100-130 V~ 50-60 Hz".
4. If applicable, connect the optional Current Transformer Interface Cable Set (P/N CTIC-LPC4300) to the rear panel of the LPC4300. The set consists of two cables, P/N 116185-G1 (CH A,B) and P/N 116185-G2 (CH C,D). Connect the cable labeled (A,B) to the connector marked "CURRENT INPUTS CHANNELS A-B). Connect the cable labeled (C,D) to the connector marked "CURRENT INPUTS CHANNELS C-D".
5. Connect the Voltage Measurement Cable (P/N 116183-G1) to the rear panel of the LPC4300. The connector is marked "VOLTAGE INPUTS 600 VRMS MAX. CHANNELS A-B-C-D". **NOTE:** This cable must be installed and removed as follows to assure proper sealing and prevent damage to the connector.



To install the cable, align the keyway in the cable connector with the tab in the

mating connector on the LPC4300. Firmly push the cable connector inward and tighten the locking ring. Push the cable connector inward *again* while rocking it from side to side. Tighten the locking ring *again*. Repeat this operation several times until the locking ring is hand tight and cannot be tightened further. A slight gap will exist at the back edge of the locking ring. Removal is the reverse of installation. Loosen the locking ring. Pull back on the cable connector while rocking it from side to side. Loosen the locking ring *again*. Repeat this operation until the cable connector is free of its mating connector.

- 6. Connect the Domestic 115 VAC Cable to an appropriate outlet.

WARNING

Follow all safety precautions shown in this manual and the PP4300 Operator's Manual when making connections to the circuit to be monitored.

- 7. Connect the voltage and current measurement cables (if applicable) to the circuit to be monitored. Use the probes and plug-on clips provided with the Power Platform 4300. Refer to the connection diagrams inside the lid of the case (Figure 6). See the PP4300 Operator's Manual for operating instructions.

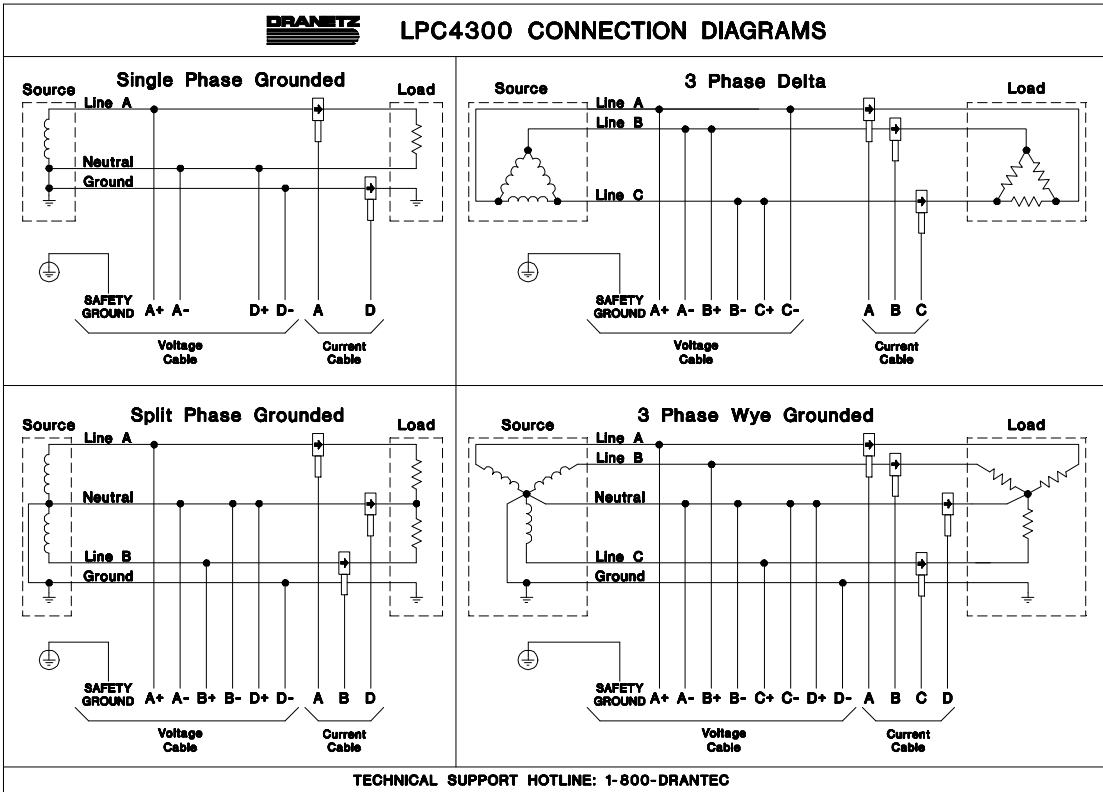


Figure 6. LPC4300 Connection Diagram (inside lid of case).

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