

Application Note #104

Line Power Cords for Models 1001WP, 1001P, 1251WP and 1251P

Take World Power Anywhere

The WP and P Series units are small portable frequency converters that can provide you with any combination of voltage and frequency used by public utilities around the world. Built in limits testing makes these units ideal for testing products that will be used in countries other than the country of origin.

To ensure their safe operation, California Instruments applied for and received official type approval for these units from Underwriters Laboratories. Both models are listed to "UL 3111 Standard for Electrical Measurement and Test Equipment" and to "CAN/CSA-C22.2 No. 1010.1-92 Standard for Electrical Measurement, Control and Laboratory Equipment." These important safety qualifications are based on the European "IEC 1010 Standard for Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use."

To meet the stringent safety standards required for UL listing, the 1251WP and 1251P require a special input power cord to handle the peak inrush current of more than 15 Amps. The NEMA 5-20 plug of the 1251WP and 1251P input power cord - shown in figure 1 - requires a special AC wall socket. This type of socket is often found in industrial buildings and laboratories.

The 1001WP and 1001P - having a maximum output power level of 1000 VA - can use the common NEMA 5-15 plug on its power cord. This allows it to be used with common USA AC wall sockets. This widely used plug is shown in figure 2.

Use of these different line cord types enables both models to be UL Listed¹. Both a "UL" mark and a "C-UL" mark are applied to the back of the unit. The "C-UL" mark is officially recognized as the equivalent of CSA in Canada.



Figure 1 : 1251WP Plug drawing



Figure 2 : 1001WP Plug drawing

¹ Removal or Replacement of the plug type violates the UL Listing

Table 1 : Line Cord Options by Country

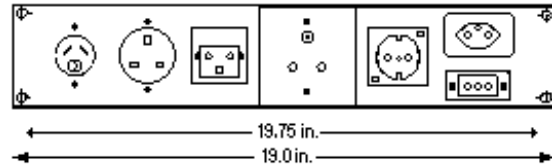
Country	1001WP/P	1251WP/P	Country	1001WP/P	1251WP/P
Continental Europe	PC1	PC11	Israel	PC6	PC16
Australia/ New Zealand	PC2	PC12	Italy	PC7	PC17
UK/Ireland	PC3	PC13	North America ²	PC8	PC18
Denmark	PC4	PC14	Switzerland	PC9	PC19
India	PC5	PC15	Japan	PC10	PC20

For countries not listed, contact factory.

International Cord Options

For applications outside the USA, we provide a variety of international line power cords. They are particularly useful for overseas customers, or if you are traveling abroad.

Due to the difference in the input receptacle, there are cord sets for the 1001WP/1001P, and the 1251WP/1251P. Table 1 indicates the country and the appropriate cord set. Please ensure that the correct option is specified.



ISS = International Socket Strip
ISR = International Socket Strip - Rack Mount Version

Figure 3 : ISR option

International Socket Strip Option

For production applications where multiple AC powered products need to be tested, a California Instruments' International Socket Strip may provide a practical output alternative. The International Socket Strip (ISS) is also available in a 19 inch rack mount format (ISR) providing 7 common international receptacles for line cords from various parts of the world (Australia/New Zealand, U.K., Denmark, India, Continental Europe, Switzerland and Italy). The ISS is wired for 220, 230 or 240 Volt input from the WP or P units. Refer to figure 3 for a drawing of the ISR option.

Contact California Instruments or your local representative for other socket strip configurations, such as several sockets for the same country.

For more information about the WP and P Series, refer to the "Portable Line Power Model 1001WP/1251WP" and "Portable AC Power P Series" data sheets. To discuss your AC power application requirements, contact your California Instruments Applications Engineer.

Contact California Instruments:

² One North American Line Cord is provided with 1001WP, 1001P, 1251WP and 1251P.

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