

Keithley Instruments 28775 Aurora Road Cleveland, Ohio 44139 1-800-935-5595 http://www.keithley.com

Unterminated Interlock Cable

Description

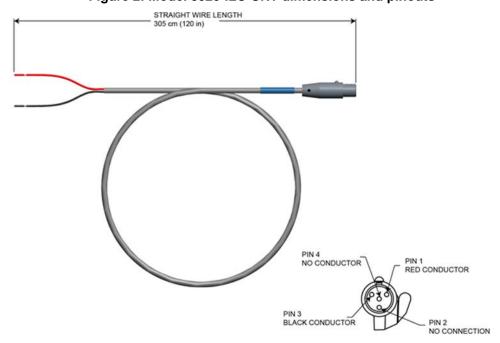
The Keithley Instruments Model 8020-ILC-UNT Unterminated Interlock Cable is used for connecting to the INTERLOCK OUT connector on the Model 8020 for use as a system interlock. The unterminated end of the cable connects to a normally-open switch at device under test (DUT) access point. For information where to connect this cable, refer to the Model 8020 High Power Interface Panel User's Manual.

Figure 1: Model 8020-ILC-UNT interlock to unterminated cable



Dimensions and pinouts

Figure 2: Model 8020-ILC-UNT dimensions and pinouts



Safety interlock usage

Any SMU capable generating more than 42 V requires the use of the safety interlock. A properly configured safety interlock disables power from the source-measure units (SMUs) when the cover or door of a test enclosure for the device under test (DUT) is opened. Power is enabled when the cover or door is closed.

A user-supplied switch is required for the safety interlock. The normally-open switch must be used on a test fixture, on the enclosure of a semiconductor prober or device handler, on the doors of a test-equipment rack, or to any access point at the device under test at which the user could be exposed to hazardous voltages.

The switch must be installed as follows:

- The switch must open when the cover or door of the test enclosure is opened.
- The switch must close when the cover or door of the test enclosure is closed.

The following drawing shows the supplied interlock cable that is used to connect the switch to the Model 8020.

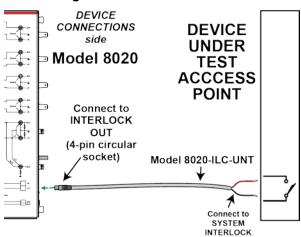


Figure 3: 8020-ILC-UNT use case

The interlocks of the SMUs in the test system must connect to the instrument connections side of the Model 8020.

The interlock circuit is powered from the connected SMUs. Power is routed through the Model 8020 to the the closed external switch to engage the interlock.

Electrical characteristics

Maximum current: 2.8 AMaximum voltage: 125 V AC