Accessories for the B2900 Precision Instrument Family

Keysight B2900B/BL Series Precision Source/Measure Units

Keysight B2960B Series 6.5 digit Low Noise Power Sources

Keysight B2980B Series Femto/Picoammeters & Electrometers Narrow



This accessory catalog introduces all of the accessories available for use with the Keysight B2900 Precision Instrument Family



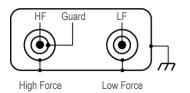
Interface Adapters and Noise Filters

Short description	Model	Additional information
Banana - Triax Adapter	N1297A	For 2-wire (non Kelvin) connection
Banana - Triax Adapter	N1297B	For 4-wire (Kelvin) connection
High Current Ultra Low Noise Filter	N1298A	High Current Ultra Low Noise Filter (21V/500mA, 100hm) for B2961/62B.
Ultra Low Noise Filter	N1298B	Ultra Low Noise Filter (42V/105mA, 50Ohm) for B2961/62B
Low Noise Filter	N1298C	Low Noise Filter (210V/3A) for B2961/62B

N1297A Banana - Triax Adapter for 2-wire (non Kelvin) connection:



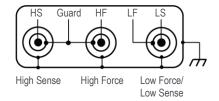
This adapter converts the 6P banana outputs to two triax connector outputs. It is available for the B2901/10BL, B2901/02/11/12B and the B2961/62B..



N1297B Banana - Triax Adapter for 4-wire (Kelvin) connection:



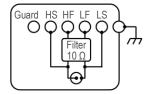
This adapter converts the 6P banana outputs to three triax connectors. It is available for the B2901/10BL, B2901/02/11/12B and the B2961/62B..



N1298A High Current Ultra Low Noise Filter (21V/500 mA, 10 Ω) for B2961/62B:



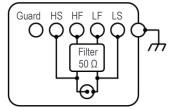
This adapter converts 6P banana outputs to one BNC connector outputs with the ultra low noise filtering capability. It can be used with the B2961/62B..



N1298B Ultra Low Noise Filter (42V/105mA, 50 Ω) for B2961/62B:



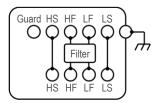
This adapter converts 6P banana outputs to one BNC connector outputs with the ultra low noise filtering capability. It can be used with the B2961/62B..



N1298C Low Noise Filter (210V/3A) for B2961/62B:



This adapter converts 6P banana outputs to 4P banana outputs with the low noise filtering capability. It can be used with the B2961/62B..



Adapters for Resistance Measurement

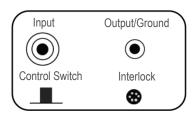
Short description	Model	Additional information
GPIO-BNC Trigger Adapter	N1294A-031	
Digital I/O Trigger Cable for Multiple Unit Control	N1294A-032	Required to use the multiple units of the B2901/10BL, B2901/02/11/12B with EasyEXPERT group+ software
High Resistance Meter Fixture Adapter	N1413A	Adapter to enable to use the N1424A/B/C, N1425A/B, N1427A/B and N1428A with the B2985/87B for resistance measurement
High Resistance Measurement Universal Adapter	N1414A	For resistance measurement using the B2985/87B

N1413A High Resistance Meter Fixture Adapter for B2985/87B:



This adapter enables to use the N1424A/B/C, N1425A/B, N1427A/B and N1428A with the B2985/87B.

In addition, by using this adapter, sourced voltage can be monitored by the Voltmeter in the B2985/87B without changing connection.



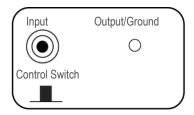
Input: Triaxial (special screw-type) Output/Ground *: High Voltage BNC (special type) Interlock: 6 pin mini plug interlock connector Note: please refer to User's Guide for Keysight B2980B Series Femto/Picoam-meter & Electrometer for the details.

N1414A High Resistance Measurement Universal Adapter for B2985/87B:



This adapter simplifies the cabling when making resistance measurement with the B2985/87B.

In addition, by using this adapter, sourced voltage can be monitored by the Voltmeter in the B2985/87B without changing connection.



Input: Triaxial
Output/Ground *: Banana connector
Note: please refer to User's Guide for Keysight B2980B Series
Femto/Picoam-meter & Electrometer for the details.

Test Fixtures

Short description	Model	Additional information
Device/Component Test Fixture	N1295A	Test Fixture with 4 Triax Connectors for Keysight B2900B/BL Series
Test Fixture	16442B	Test Fixture for E5270 and general use
Resistivity Cell	N1424A	For N1413 with B2980 Series(50 mm Electrodes)
	N1424B	For N1413 with B2980 Series(26/50 mm Diameter Electrodes)
	N1424C	For N1413 with B2980 Series (26/50/76 mm Diameter Electrodes)
Component Test Fixture	N1428A	For N1413 with B2980 Series

N1295A Device/Component Test Fixture with 4 Triax Connectors for Keysight B2900B/BL Series:



This test fixture has four triaxial connectors, allowing it to make two 2-wire connections or 4-wire connections.

The N1295A test fixture supports up to 42

It is compatible with the B2901/10BL, B2901/02/11/12B and B2961/62B. The N1295A comes with the following

V and 1.05 A DC.

- accessories:

 Pin plug to miniature clip wire (4 pcs)
- Pin plug to pin plug wire (2 pcs)



16442B Test Fixture:



The 16442B Test Fixture can also be used with the B2900B/BL Series Precision Instruments.

The 16442B Test Fixture has 6 triaxial connectors and 6 BNC coaxial connectors for interfacing with the B2900B/BL Series Precision Instruments.

The triaxial connectors of the 16442B support up to 200 V and 1 A DC.

It is compatible with the B2901/10BL, B2901/02/11/12B and B2961/62B...

The 16442B comes with the following accessories:

- Blank PTFE board
- 28-pin dual-in-package (DIP) socket module
- 0.075-inch universal socket module
- 0.5-inch universal socket module
- Miniature banana to pin plug cables, black (4 pcs), red (4 pcs), blue (4 pcs)
- Pin plug to pin plug cables, black (3 pcs), red (3 pcs), blue (3 pcs)
- Miniature banana to miniature clip cables, black (3 pcs), red (3 pcs), blue (3 pcs) –
 Miniature banana to miniature banana, black (3 pcs), red (3 pcs), blue (3 pcs) –
 Connection pin set (10 ea)
- Accessory case

These accessories give the 16442B Test Fixture the ability to support a wide range of measurement applications.

Note: Please refer to User's Guide for Keysight 16442B Test Fixture for the details.

N1424A/B/C Resistivity Cell:



This N1424A/B/C resistivity cell can be used with the B2985/87B to measure surface or volume resistivity of insulation materials. Three kinds of electrodes (diameter: 26 mm/50 mm/76 mm) are available to meet various insulation measurement standards such as ASTM D-257.

The N1413A adapter is required to use the N1424A/B/C resistivity cell with the B2985/87B.

The 50 mm diameter electrode is furnished with the N1424A. The 26 mm/50 mm diameter electrodes are furnished with the N1424B



The 26 mm/50 mm/76 mm diameter electrodes in the carrying case are furnished with the N1424C $\,$



Note: Please refer to User's Guide for Accessories for Keysight B2985B/B2987B for the details.

N1428A Component Test Fixture:





This N1428A component test fixture can be used with the B2985/87B to measure SMD, lead and various type of devices. The N1413A adapter is required to use the N1428A component test fixture with the B2985/87B.

The N1428A comes with the following accessories:

- SMD module
- Flat table
- Miniature Banana-plug cable (2 pcs)
- 100 kΩ output resistor
- 1 MΩ output resistor
- 10 MΩ output resistor
- 100 MΩ output resistor
- Alligator clip (2 pcs)
- Carrying case

Note: Please refer to User's Guide for Accessories for Keysight B2985B/B2987B for the details.

Signal Cables

Short description	Model	Additional information
Triax cable	16494A-001	Low leakage Triax cable (200 V, 1.5 m)
	16494A-002	Low leakage Triax cable (200 V, 3.0 m)
	16494A-003	Low leakage Triax cable (200 V, 0.8 m)
	16494A-004	Low leakage Triax cable (200 V, 0.4 m)
	16494A-005	Low leakage Triax cable (200 V, 4.0 m)
High Current Triax cable	16493L-001	Triax cable for current higher than 1 A (1.5 m) [Ground Unit cable for B1500/E5260/E5270/41501 (Triax, 1.5 m)]
	16493L-002	Triax cable for current higher than 1 A (3.0 m) [Ground Unit cable for B1500/E5260/E5270/41501 (Triax, 3.0 m)]
High Voltage Triax cable	N1412A	Low leakage Triax cable (500 V, 1.5 m)
	N1412B	Low leakage Triax cable (500 V, 3.0 m)
	N1412C	Low leakage Triax cable (500 V, 6.0 m)
Coax cable	16493B-001	Coax cable (1.5 m)
	16493B-002	Coax cable (3.0 m)
High Current Coax cable	16493U-001	High Current BNC Coax cable (1.5 m)
	16493U-002	High Current BNC Coax cable (3.0 m)
BNC cable	U2921A-100	Coaxial BNC cable (1.2 m)
High Voltage Test leads	U8201-60001	High voltage test leads (1.3 m), black (1 pcs), red (1 pcs)
Triax to Alligator cable	N1415A	Triax to alligator cable (1.5 m)
Low Noise Test Leads	N1425A	For N1413 with B2980 series (1.5 m)
	N1425B	For N1413 with B2980 series (3.0 m)
Pin Probes	N1426A	Pin Probes for N1425
Soldering Sockets	N1426B	Soldering Sockets for N1425
Alligator Clips	N1426C	Alligator Clips for N1425
Low Noise Test Cables	N1427A	For N1413 with B2980 series (1.5 m)
	N1427B	For N1413 with B2980 series (3.0 m)

16494A Triaxial cable:



The 16494A Triaxial cable is suitable for low current applications down to the sub-fA level. It supports a maximum voltage/current of 200V/1A DC.

Cable length (options):

Cable length (option 16494A-001: 1.5 m 16494A-002: 3.0 m 16494A-003: 0.8 m 16494A-004: 0.4 m 16494A-005: 4.0 m

16493L High Current Triaxial cable:



This cable can be used as a general purpose triaxial cable for high current applications up to 4.2 A DC and 200 V. It can also be used for low current applications down to the sub-pA level.

Cable length (options):

16493L-001: 1.5 m 16493L-002: 3.0 m

N1412A/B/C High Voltage Triaxial cable:



The N1412A/B/C Triaxial cable is suitable for low current applications down to the sub-fA level. It supports a maximum voltage/current of 500 V/1 A DC.

Cable length (options):

N1412A: 1.5 m N1412B: 3.0 m N1412C: 6.0 m

16493B Coaxial cable:



The 16493B Coaxial cable is suitable for general and low noise applications for up to 40 V and 200 mA

Cable length (options):

16493B-001: 1.5 m 16493B-002: 3.0 m

16493U High Current Coaxial cable:



The 16493U High Current Coaxial cable is suitable for high current applications and it is compatible with the B2901/10BL, B2901/02/11/12B, B2961/62B. and B2981/83/85/87B. It supports up to 40 V and 20 A pulse.

Cable length (options):

16493U-001: 1.5 m 16493U-002: 3.0 m

U2921A-100 BNC cable:



The U2921A-100 Coaxial BNC cable (1.2 m) is compatible with the B2901/10BL, B2901/02/11/12B, B2961/62B. and B2981/83/85/87B.

U8201-60001 High Voltage Test leads:



U8201-60001 includes one red and one black high voltage test lead with banana plug ends.

These cables are included in the U8201A (see "Other accessories" on page 14) The leads are (approx.) 1.3 m and support CAT III 1000 V, 15A.

N1415A Triax to Alligator cable:



Triax cable terminated with a male triax connector on one end and three alligator clips on the other. It supports up to 200 V

It is compatible with the B2901/10BL, B2901/02/11/12B, B2961/62B. and B2981/83/85/87B.

Note: Appropriate connections between the alligator clips, shielding box and DUT are required when performing sensitive low-level measurements.

N1425A/B Low Noise Test Leads:



N1425A/B is used to measure resistance with the B2985/87B.

The N1413A and one of the N1426A/B/C are required to use the N1425A/B with the B2985/87B

Cable length (options): N1425A: 1.5 m N1425B: 3.0 m

Note: Please refer to User's Guide for Accessories for Keysight B2985B/B2987B for the details.

N1426A Pin Probes:

N1426B Soldering Sockets:







N1426C Alligator Clips:



Pin probes used with the N1425 for the B2985/87B Soldering sockets used with the N1425 for the B2985/87B.

Alligator clips used with the N1425 for the B2985/87B.

N1427A/B Low Noise Test Cables:



N1427A/B is used to measure resistance with the B2985/87B.

The N1413A is required to use the N1427A/B with the B2985/87B.

Cable length (options): N1427A: 1.5 m N1427B: 3.0 m

Note: Please refer to User's Guide for Accessories for Keysight B2985B/B2987B for the details.

Interface Cables

Short description	Model	Additional information	
Digital I/O cable	16493G-001	For triggering use among the B2901/10BL, B2901/02/11/12B and the B2961/62B. (1.5 m)	
	16493G-002	For triggering use among the B2901/10BL, B2901/02/11/12B and the B2961/62B. (3.0 m)	
Digital I/O T-cable	N1253A-100	Digital I/O T-cable for trigging	
RS-232 Cable Kit	34398A	RS-232 cable kit for Digital I/O of the B2980B Series for triggering	
Interlock cable	N1294A-011	For 16442A/B test fixture (GPIO Dsub25 to 6pin mini plug, 1.5 m)	
	N1294A-012	For 16442A/B test fixture (GPIO Dsub25 to 6pin mini plug, 3.0 m)	
	N1411A	4 pin terminal plug to 6 pin circular plug (1.5 m)	
	N1411B	4 pin terminal plug to 6 pin circular plug (3.0 m)	
GPIB cable	10833A	GPIB cable (1.0 m)	
	10833B	GPIB cable (2.0 m)	
	10833C	GPIB cable (4.0 m)	
	10833D	GPIB cable (0.5 m)	
USB A-BI-O Cable	8121-1696	USB A-B I-O cable (2.0 m), 4COND LG PVC White	
GPIO-BNC Trigger Adapter	N1294A-031		
Digital I/O Trigger Cable for Multiple Unit Control	N1294A-032	Required to use the multiple units of the B2901/10BL, B2901/02/11/12B with EasyEXPERT group+ software	

16493G Digital I/O cable:



The 16493G Digital I/O cable supports trigger signal distribution for the B2901/10BL, B2901/02/11/12B and the B2961B/62B.

Cable length (options): 16493G-001: 1.5 m 16493G-002: 3.0 m

N1253A-100 Digital I/O cable:



The N1253A-100 Digital I/O cable can distribute trigger signals for three units and it supports the B2901/10BL, B2901/02/11/12B and the B2961/62B. (male - male - female).

34398A RS-232 Cable Kit:



The 34398A is an RS-232 cable kit which includes a 9-pin (f) to 9-pin(f) RS-232 cable and a 9-pin (m) to 25-pin (f) adapter. It is compatible with the B2981/83/85/87B and supports trigger signal distribution for the B2981/83/85/87B, B2961B/62B and B2901/10BL, B2901/02/11/12B.

N1294A-011/012 Interlock cable for 16442B test fixture:



The interlock cable is used to connect between the 16442B test fixture and the instrument's GPIO Dsub25 connector. It is compatible with the B2901/10BL, B2901/02/11/12B and the B2961/62B.

Cable length (options): N1294A-011: 1.5 m N1294A-012: 3.0 m

N1411A/B Interlock cable:



N1411A/B is an interlock cable terminated with a 4-pin terminal plug on one end and 6-pin circular plug on the other. It is compatible with the B2981/83/85/87B.

Cable length (options): N1411A: 1.5 m N1411B: 3.0 m

10833A/B/C/D GPIB cable:



The Keysight 10833 GPIB cable is engineered for exceptional reliability and durability even under the harshest conditions.

Cable length (options): 10833A: 1.0 m 10833B: 2.0 m 10833C: 4.0 m 10833D: 0.5 m

8121-1696 USB cable - 2 m:



The USB cable is used to interface between a PC controller and the instrument.

N1294A-031 GPIO - BNC Trigger Adapter:



This adapter is used to route the triggering signals from the instrument's GPIO Dsub25 connector for two coax connectors. It is available for the B2901/10BL, B2901/02/11/12B and the B2961/62B..

In addition, you can access any of the Digital I/O signal pins by soldering a wire to the corresponding Digital I/O path located on the adapter's internal printed circuit board.

Note: This requires opening the N1294A-031.



N1294A-032 Digital I/O Trigger Cable for Multiple Unit Control



This adapter is required to use the multiple units of the B2901/10BL, B2901/02/11/12B with EasyEXPERT group+software. The adapter has 4 Dsub25 connectors, which enables you to connect up to 4 units of the B2901/10BL, B2901/02/11/12B and to control them through EasyEXPERT group+software.

Cable Adapters and Connectors

Short description	Model	Additional information
Triax(m) to BNC (f) adaptor	N1254A-101	Triax(male) to BNC (female) adaptor
Triax(f) to BNC (m) adaptor	N1254A-102	Triax(female) to BNC (male) adaptor
Triax(m) to BNC (f) adaptor	N1254A-103	Triax(male) to BNC (female) adaptor
Triax (f) to BNC (m) adaptor	N1254A-104	Triax (female) to BNC (male) adaptor
Triax (f) to BNC (m) adaptor	N1254A-105	Triax (female) to BNC (male) adaptor
Triax (m) to BNC (f) adaptor	N1254A-106	Triax (male) to BNC (female) adaptor
Triax (m) to Triax (f) adaptor	N1254A-107	Triax (male) to Triax (female) adaptor
Triax (f) to Triax (f) adaptor	1250-2618	Triax (female) to Triax (female) adapter feedthrough
Coax Tee Adapter (m-f-f)	1250-2405	Adapter-Coax Tee Male-BNC Female-BNC Female BNC
Triax Tee Adapter (f-m-f)	1250-1551	BNC Adapter-Coax Tee Female-Triax Male-Triax Female-Triax
Triax Bulkhead connector	N1416A	Triax bulkhead connector, 200V
	N1416B	Triax bulkhead connector, 500V
Open cap	N1417A	Open cap for Triax connector
Double Banana – BNC (f)	1251-2277	

N1254A-101 Triax (m) to BNC (f) adaptor:



Male triax to female BNC adapter (guard connected to the coax outer conductor). It supports up to 200 V.

N1254A-102 Triax (f) to BNC (m) adaptor:



Female triax to male BNC adapter (guard connected to the coax outer conductor). It supports up to 200 V.

N1254A-103 Triax (m) to BNC (f) adaptor:



Male triax to female BNC adapter (guard connected to the coax outer conductor). It supports up to 200 V.

N1254A-104 Triax (f) to BNC (m) adaptor:



Female triax to male BNC adapter (guard connected to the coax outer conductor). It supports up to 200 V.

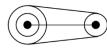
N1254A-105 Triax (f) to BNC (m) adaptor:



Female triax to male BNC adapter (guard is not connected to the BNC terminal). It supports up to 200 V.

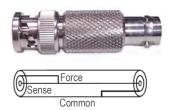
N1254A-106 Triax (m) to BNC (f) adaptor:





Male triax to female BNC adapter (guard is not connected to the BNC terminal). It supports up to 200 V.

N1254A-107 Triax (m) to Triax (f) adaptor:



Female triax to male triax adapter. Male guard is connected to sense, and female guard is connected to the body. This adapter is used to convert the Low output of the N1297B Banana - Triax Adapter from Kelvin to non-Kelvin sensing.

1250-2618 Triax (f) to Triax (f) adapter:



Female triax to female triax adapter for use with triax interconnect. It supports up to 200 V.

1250-2405 Coax Tee Adapter:



BNC tee adapter, male- female - female.

1250-1551 Triax Tee Adapter:



Triax tee adapter, male- female - female. It supports up to 200 V.

N1416A/B Triax bulkhead connector:



Triax bulk-head connector for soldered connections. N1416A and N1416B support a maximum voltage of 200 V and 500V, respectively.

N1417A Open Cap for Triax connector:



Protective shield/cap for Triax connector

1251-2277 Double Banana – BNC (f) :



Dual Banana to BNC adapter for connecting instrument with dual banana jack

Rack Mount Kit

Short description	Model	Additional information
Rack mount kit	1CM124A	
Dual Flange Kit, 2U	1CM107A	
Dual Lock Link Kit	34194A	
Basic Rail kit	E3663AC	

1CM124A Rack mount kit:

1CM107A Dual Flange kit,

34194A Dual Lock Link kit:

E3663AC Basic Rail kit:









The 1CM124A Rack mount kit can rack mount a single B2900B/BL Series Precision Instrument in an Keysight rack.

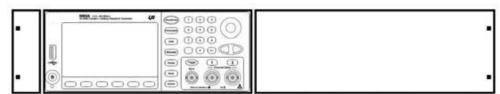
The 1CM107A is a 2U height rack mount flange kit.

The 34194A Dual Lock Link kit is used with the 1CM107A to mount two Keysight System II (half-width, 2U height -88.1 mm) instruments side-byside.

The E3663AC System II rails support mounting Keysight System II instruments in an Keysight rack.

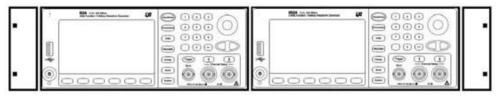
Rack mount image for single B2900B/BL Series Precision Instrument:

- 1 x B2900B/BL Series Precision Instrument
- 1CM124A Rack mount Kit.
- E3663AC Basic Rail kit



Rack mount image for double B2900B/BL Series Precision Instruments:

- 2 x B2900B/BL Series Precision Instruments
- 1CM107A Dual Flange kit, 2U
- 34194A Dual Lock Link kit
- E3663AC Basic Rail kit



Other Accessories

Short description	Model	Additional information
Combo test lead kit	U8201A	
Test lead kit	U8202A	Test lead kit, electronic
Kelvin probe set	11059A	Banana-Clip Kelvin probe set
BNC to 2 wires	U2941A-107	BNC to 2 wires - 1.0 m
Cable Plug-Plug	N1295-61701	
Cable Plug-Clip	N1295-61702	
Alligator clips	U3606-60030	Alligator clips, black (1pcs), red (1 pcs)
Interlock cable adapter set	16435A	Interlock cable adapter to convert the N1294A-011's 6 pin connector to BNC
Lithium-ion battery pack	N1418A	Lithium-ion battery pack for the B2983B/87B
Thermocouple	N1423A	Thermocouple for the B2985/87B

U8201A Combo Test Lead kit:



The U8201A Combo Test Lead Kit includes a pair of test leads, test probes, alligator clips, SMT grabbers, fine-tip test probes, and banana plugs. Included test probe lead supports CAT III 1000 V, 15 A.

U8202A Test Lead kit:



The U8202A Test Lead Kit includes a pair of test lead and probes, alligator clips, SMT grabbers, and fine-tip test probes. Included test lead & probe support CAT III 1000 V, 15 A.

11059A Kelvin Probe set:



The 11059A Kelvin probe set consists of two flat tweezers, four banana jacks, and one ground guard connector. It supports maximum voltage of 42V.

U2941A-107 BNC to 2 wires:



This connector supports non-grounded BNC connections. One end is BNC male and the other end consists of two open wires.

N1295-61701 Cable Plug-Plug:



The plug-plug cable for N1295A.

N1295-61702 Cable Plug-Clip:



The plug-clip cable for N1295A.

U3606-60030 Alligator clips:



U3606-60030 includes one red and one black alligator clips with boots. These are included in the U8201A and U8202A. The alligator clips support CAT III 1000 V, 10 A.

16435A Interlock cable adapter set:



This adapter converts the 6 pin interlock connector of the N1294A-011 interlock cable to BNC female output.

N1418A Lithium-ion battery



Lithium-ion rechargeable battery for the B2983B/87B.

N1423A Thermocouple:



K-type thermocouple (3.5 m) for the B2985/87B.