

User's and Service Guide

11851B **50 Ω Type-N RF Cable Set**



Part Number 11851-90007 Supersedes: September 1999

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General Information

To obtain optimum performance from this cable set, observe these simple precautions:

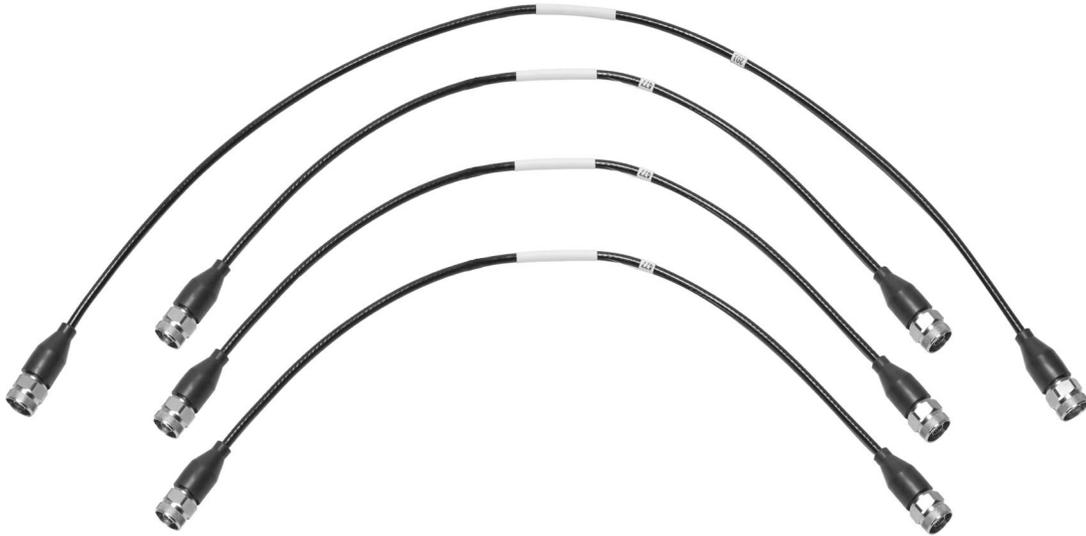
- Flex and straighten the cables as little and seldom as possible.
- Make connections carefully to avoid misalignment and connector damage or inaccurate measurements.
- Keep the connectors free of dirt and metallic particles.
- If you must clean the connectors, try clean compressed air first. Do not use abrasives. With a plastic swab, apply *only* liquid Freon (trichlorotrifluoroethane) as a solvent.
- Type-N (male) outer conductor shoulder, dielectric recession, or center conductor step: 0.208 inch minimum.

Description

The 11851B RF cable set consists of four type-N 50Ω cables, specified from 300 kHz to 3 GHz. This set provides the shielded RF connections required when using network analyzers with test sets or power splitters. The cables can be ordered as either phase-matched (three phase matched cables, plus one longer unmatched cable) or unmatched.

Model	Description	Qty	Part Number
11851B Standard	Phase-matched type-N 50Ω cables	3	8120-4781
	Unmatched, longer type-N 50Ω cable	1	8120-4780
11851B Option B24	Unmatched type-N 50Ω cables	3	8120-8862
	Unmatched, longer type-N 50Ω cable	1	8121-0001

Figure 1. Model 11851B Cables, Option B24



Operating Characteristics

	11851B Standard	11851B Option B24
Impedance	50Ω (nominal)	50Ω (nominal)
Connectors	Type-N, male	Type-N, male
Phase Match	≤ 4° (at 2 GHz) (n/a for the 1 unmatched cable)	n/a
Return Loss	≥ 24 dB (300 kHz to 2 GHz) ≥ 22 dB (2 GHz to 3 GHz)	≥ 24 dB (300 kHz to 2 GHz) ≥ 22 dB (2 GHz to 3 GHz)

Physical Characteristics

	11851B Standard	11851B Option B24
Length:		
3 shorter cables	61 cm (24 inches)	61 cm (24 inches)
1 longer cable	86 cm (34 inches)	86 cm (34 inches)
Weight (all 4 cables):		
Net	0.91 kg (2 lbs)	0.91 kg (2 lbs)
Shipping	1.36 kg (2 lbs)	1.36 kg (2 lbs)

Warranty

This Agilent Technologies instrument product is warranted against defects in material and workmanship for a period of one year from date of delivery. During the warranty period, Agilent Technologies will, at its option, either repair or replace products which prove to be defective.

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Assistance

Product maintenance agreements and other customer assistance agreements are available for Agilent Technologies Products.

For any assistance, contact your nearest Agilent Technologies Sales and Service Office. Refer to the Contacting Agilent table on the following page.

Table 1-1. Contacting Agilent**Online assistance:** www.agilent.com/find/assist

United States <i>(tel)</i> 1 800 452 4844	Latin America <i>(tel)</i> (305) 269 7500 <i>(fax)</i> (305) 269 7599	Canada <i>(tel)</i> 1 877 894 4414 <i>(fax)</i> (905) 282-6495	Europe <i>(tel)</i> (+31) 20 547 2323 <i>(fax)</i> (+31) 20 547 2390
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Malaysia <i>(tel)</i> 1 800 828 848 <i>(fax)</i> 1 800 801 664	Philippines <i>(tel)</i> (632) 8426802 <i>(tel)</i> (PLDT subscriber only): 1 800 16510170 <i>(fax)</i> (632) 8426809 <i>(fax)</i> (PLDT subscriber only): 1 800 16510288	Thailand <i>(tel)</i> outside Bangkok: (088) 226 008 <i>(tel)</i> within Bangkok: (662) 661 3999 <i>(fax)</i> (66) 1 661 3714	Hong Kong <i>(tel)</i> 800 930 871 <i>(fax)</i> (852) 2506 9233
Taiwan <i>(tel)</i> 0800-047-866 <i>(fax)</i> (886) 2 25456723	People's Republic of China <i>(tel)</i> (preferred): 800-810-0189 <i>(tel)</i> (alternate): 10800-650-0021 <i>(fax)</i> 10800-650-0121	India <i>(tel)</i> 1-600-11-2929 <i>(fax)</i> 000-800-650-1101	