

HP 86205A/86207A

HP 86205A/86207A RF Bridges

The HP 86205A/86207A high directivity RF bridges offer unparalleled performance in a variety of general-purpose applications. They are ideal for accurate reflection measurements and signal leveling applications.

Specifications Summary

| HP 86205A | HP 86207A |
|----------------------------------|---|
| 50 Ω | 75 Ω |
| 300 kHz to 6 GHz | 300 kHz to 3 GHz |
| 30 dB, 0.3 MHz to 5 MHz | 30 dB, 0.3 MHz to 5 MHz |
| 40 dB, 5 MHz to 2 GHz | 40 dB, 5 MHz to 1.3 GHz |
| 30 dB, 2 GHz to 3 GHz | 35 dB, 1.3 GHz to 2 GHz |
| 20 dB, 3 GHz to 5 GHz (typ.) | 30 dB, 2 GHz to 3 GHz |
| 16 dB, 5 GHz to 6 GHz (typ.) | • |
| (< 3 GHz) 16.0 dB, + 0.15 dB/GHz | |
| (> 3 GHz) 16.5 dB, -0.20 dB/GHz | |
| 1.5 dB, + 0.1 dB/GHz | |
| 25 dBm | |
| 50 Ω Type-N (female) | 75 Ω Type-N (female) |
| | 30 0 kHz to 6 GHz 30 dB, 0.3 MHz to 5 MHz 40 dB, 5 MHz to 2 GHz 30 dB, 2 GHz to 3 GHz 20 dB, 3 GHz to 5 GHz (typ.) 16 dB, 5 GHz to 6 GHz (typ.) (<3 GHz) 16.0 dB, + 0.15 dB/GHz (>3 GHz) 16.5 dB, - 0.20 dB/GHz 15 dB, + 0.1 dB/GHz 25 dBm |

Physical Characteristics

Size: $93 \text{ mm H} \times 160 \text{ mm W} \times 23 \text{ mm D} (3.7 \text{ in} \times 6.3 \text{ in} \times 1 \text{ in})$ Weight: Net, 0.57 kg (1.3 lb); shipping, 1.8 kg (4 lb)

HP 11850C/D Three-Way Power Splitters

Specifications Summary

| | HP 11850C | HP 11850D |
|--|---------------------------------------|--------------------------------|
| Impedance | 50 Ω | 75 Ω |
| Frequency Range | DC to 3 GHz | DC to 2 GHz |
| Tracking | $\pm 0.25 \text{ dB, } \pm 3^{\circ}$ | $\pm 0.2 dB, \pm 2.5^{\circ}$ |
| Equivalent Source Match | 30 dB at 1.3 GHz | 30 dB at 1.3 GHz |
| (ratio or leveling) | 20 dB at 3 GHz | 20 dB at 3 GHz |
| Nominal Insertion Loss | 9.5 dB + 1 dB/GHz | 7.8 dB |
| Input Port Match | | |
| DC to 1.3 GHz | 20 dB | 20 dB |
| 1.3 GHz to F _{max} ¹ | 10 dB | 10 dB |
| RF Connectors | | |
| RF Input: (female) | 50 Ω Type-N | 50 Ω Type-N |
| All Others: (female) | 50 Ω Type-N | 75 Ω Type-N |

 $^{1}F_{\text{max}}$ is the upper frequency limit of the associated power splitter.

HP 11851B RF Cable Kit

This kit includes three 610-mm (24-in) 50 Ω cables phase matched to 4° at 1.3 GHz and one cable 860 mm (34-in). Connectors are type-N (male).

HP 11852B 50 Ω **/75** Ω **Minimum Loss Pad**

The HP 11852B is a low SWR minimum loss pad required for measurements on 75 Ω devices with the HP 8753.

Frequency Range: DC to 3.0 GHz

Insertion Loss: 5.7 dB

Return Loss: 75 Ω : typically \geq 30 dB, 50 Ω : typically \geq 26 dB

Maximum Input Power: 250 mW (+24 dBm) RF Connectors: 50 Ω type-N (f) and 75 Ω type-N (m) standard, 50 Ω type-N (m) and 75 Ω type-N (f) Option 004

Type-N Accessory Kits

Each kit contains a type-N (female) short, a type-N (male) short, two type-N (male) barrels, two type-N (female) barrels, and a storage case.

HP 11853A 50 Ω Type-N Accessory Kit

The HP 11853A accessory kit furnishes the RF components required for measurement of devices with 50 Ω type-N connectors using the HP 11850C, 85044A, 85046A, or 85047A.

HP 11855A 75 Ω Type-N Accessory Kit

The HP 11855A accessory kit furnishes the RF components required for measurement of devices with 75 Ω type-N connectors using the HP 11850D, 85044B, or 85046B. This kit also contains a 75 Ω type-N (male) termination.

BNC Accessory Kits

The BNC accessory kit contains two type-N (male) to BNC(female) adapters, two type-N (male) to BNC (male) adapters, two type-N (female) to BNC (female) adapters, two type-N (female) to BNC (male) adapters, a BNC (male) short, and a storage case.

HP 11854A 50 Ω BNC Accessory Kit

The HP 11854A accessory kit furnishes the RF components required for measurement of devices with 50 Ω BNC connectors using the HP 11850C, 85044A, 85046A, or 85047A.

HP 11856A 75 Ω BNC Accessory Kit

The HP 11856A furnishes RF components required for measurement of devices with 75 Ω BNC connectors using the HP 11850D, 85044B, or 85046B. This kit also contains a 75 Ω BNC (male) termination.

Test Port Cables

HP 11857D 50 Ω APC-7 Test Port Cables

The HP 11857D includes two precision 61-cm (24-in) cables, phase matched to 2° at 1.3 GHz for use with the HP 8753D/E, 85046A or 85047A S-parameter test sets. Connectors are $50\,\Omega$ APC-7.

HP 11857B 75 Ω Type-N Test Port Cables

The HP 11857B includes two precision 61-cm (24-in) cables, phase matched to 2° at 1.3 GHz for use with the HP 8753D/E Option 075 or HP 85046B S-parameter test set. One cable has 75 Ω type-N (male) connectors on both ends; the other has one type-N (male) and one type-N (female) connector.

Transit Cases

HP offers a complete line of sturdy transit cases that protect your instrument from shock, vibration, moisture, impact, and contamination, providing a secure enclosure for shipping. Model 9211-2657 fits the HP 8753E and model 9211-2656 fits the HP 8752C.

Calibration Kits

The calibration kits in the HP 8753 family contain precision standards used in accuracy enhancement procedures to characterize the systematic errors of an HP 8753 measurement system.

HP 85031B 7-mm Calibration Kit

The HP 85031B calibration kit contains a set of precision 7-mm fixed terminations, and a one-piece open/short circuit used to calibrate the HP 8753 and its 50 Ω test sets for measurement of devices with precision 7-mm connectors. This kit is specified 300 kHz to 6 GHz.

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