

# 7712 3.5 GHz 50 Ω RF Module

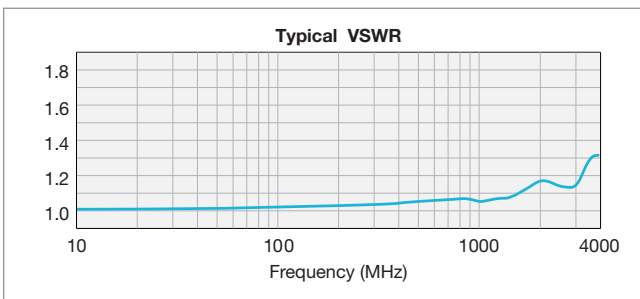
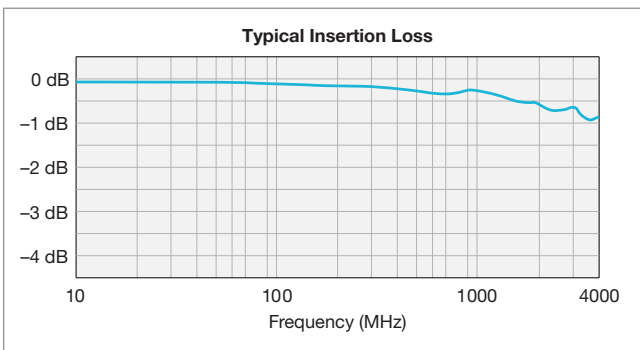
## Datasheet



The 7712 plug-in module offers a 50W dual 1×4 multiplexer configuration with rear panel SMA 14 connectors. Multiple multiplexers can be cascaded to build scalable matrix and multiplexer systems for a large number of devices under test and RF source/measurement instruments. One channel in each multiplex bank is always closed to the corresponding OUT connector. The 3.5 GHz RF switching capability of the 7712 makes it ideal for testing wireless modules operating in the 2.4 GHz and lower industrial, scientific, and medical (ISM) radio bands.

### Key Features

- 3.5 GHz bandwidth
- Dual 1×4 configuration
- Onboard switch closure counter
- Onboard S parameter storage



### Specifications

#### Inputs (Channels 1–8)

Maximum Signal Level	<b>Any channel to any channel or chassis (1–8):</b> 30 Vrms (42 V peak for AC waveforms) or 42 VDC, 0.5A.
Maximum Power	20 W per module, 10 W per channel (refer to 7711/7712 Manual PA-818 for measurement considerations).
Contact Life	5×10 <sup>6</sup> no load, 1×10 <sup>5</sup> rated load (resistive load).
Contact Potential	<12 μV.
Contact Resistance	<0.5 Ω (initial), <1 Ω (end of life).
Rise Time	<200 ps (guaranteed by design).
Signal Delay	<1.5 ns.

### General

Relay Type	High frequency electromechanical.
Contact Configuration	Dual 1×4 multiplexer, single pole four throw, Channels 1 and 5 are normally closed. <b>Note:</b> One channel in each multiplex bank is always closed to the corresponding OUT connector.
Close Channel	ROUTE:CLOSE allows a single channel in a multiplex bank to be closed. ROUTE:MULTIPLE:CLOSE allows two channels (one in each bank) to be closed at one time.
Open Channel	ROUTE:OPEN:ALL closes CH1 and CH5 to OUT A and OUT B respectively.
Actuation Time	<10 ms.
Connector Type	Ten external rear panel SMA connectors.
Mating Torque	0.9 N·m (8 in-lb).
Isolation	<b>Multiplexer to Multiplexer:</b> >1 GΩ. <b>Center to Shield:</b> >1 GΩ, <20 pF. <b>Channel to Channel:</b> >100 MΩ.

#### Environmental and Safety

**Operating Environment:** Specified for 0° to 50°C. Specified to 80% R.H. at 35°C.  
**Storage Environment:** -25° to 65°C.  
**EMC:** Conforms to European Union EMC Directive.  
**Safety:** Conforms to European Union Low Voltage Directive  
**RoHS:** Conforms to European Union RoHS Directive

Weight 0.5 kg (1.1 lb).

### Available Accessories

7712-SMA-1	SMA Cable, male to male, 1 m (3.3 ft)
7712-SMA-N	Female SMA to Male N-Type Adapter
S46-SMA-0.5	SMA Cable, male to male, 0.15 m (0.5 ft.)
S46-SMA-1	SMA Cable, male to male, 0.3 m (1 ft.)
S46-SMA-1.7	SMA Cable, Male to Male, 0.58 m (1.7 ft.)

### Available Services

7712-3Y-EW	1-year factory warranty extended to 3 years from date of shipment
------------	---

### Ordering Information

7712	3.5 GHz 50 Ω RF Module
Warranty	1 year

**Contact Information:**

**Australia\*** 1 800 709 465  
**Austria** 00800 2255 4835  
**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Belgium\*** 00800 2255 4835  
**Brazil** +55 (11) 3759 7627  
**Canada** 1 800 833 9200  
**Central East Europe / Baltics** +41 52 675 3777  
**Central Europe / Greece** +41 52 675 3777  
**Denmark** +45 80 88 1401  
**Finland** +41 52 675 3777  
**France\*** 00800 2255 4835  
**Germany\*** 00800 2255 4835  
**Hong Kong** 400 820 5835  
**India** 000 800 650 1835  
**Indonesia** 007 803 601 5249  
**Italy** 00800 2255 4835  
**Japan** 81 (3) 6714 3010  
**Luxembourg** +41 52 675 3777  
**Malaysia** 1 800 22 55835  
**Mexico, Central/South America and Caribbean** 52 (55) 56 04 50 90  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**The Netherlands\*** 00800 2255 4835  
**New Zealand** 0800 800 238  
**Norway** 800 16098  
**People's Republic of China** 400 820 5835  
**Philippines** 1 800 1601 0077  
**Poland** +41 52 675 3777  
**Portugal** 80 08 12370  
**Republic of Korea** +82 2 6917 5000  
**Russia / CIS** +7 (495) 6647564  
**Singapore** 800 6011 473  
**South Africa** +41 52 675 3777  
**Spain\*** 00800 2255 4835  
**Sweden\*** 00800 2255 4835  
**Switzerland\*** 00800 2255 4835  
**Taiwan** 886 (2) 2656 6688  
**Thailand** 1 800 011 931  
**United Kingdom / Ireland\*** 00800 2255 4835  
**USA** 1 800 833 9200  
**Vietnam** 12060128

\* European toll-free number. If not accessible, call: +41 52 675 3777



Find more valuable resources at [TEK.COM](http://TEK.COM)

Copyright © Tektronix. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks or registered trademarks of their respective companies.

