



Wireless RF Test Enclosures

JRE LAN10G-2 DUAL ETHERNET FILTERED INTERFACE

Innovative new Patented design is NOT a low pass filter - which can impact data signals

- Unique ability to discern between Data and unwanted signals, extremely broadband
- Completely passive, PoE power passing compatible
- 80 db isolation in test system from 50 MHz to over 6 GHz
- 10GBASE-T Ethernet speeds as well as 2.5G and 5G BASE-T

The JRE LAN-10G-2 Filtered Interface consists of two Ethernet 10GBASE-T compliant filters, using standard RJ-45 connectors, inside a single machined aluminum housing which provides exceptional RF shielding on all data and power lines.

These data filters operate on an entirely new principle in data signal filtering. Previous filter designs used low pass filtering on the data lines to attenuate interfering wireless RF signals - however, as data speeds have increased, the data signals fall within the same frequency range as the interfering signals. Thus, simple low pass filtering cannot be used since such a filter will attenuate both the data and the interference.

Our Patented design uses an innovative application of signal phasing techniques and topology to filter out all RF signals except for the desired data signals. This ability to discriminate between data signals and undesired RF signals is especially valuable when testing at both Ethernet 10GBASE-T and USB 3 Super Speed data rates (since the signaling rate falls within Wireless signal frequencies), or when testing devices where the potential RF interfering frequencies fall within the pass band of a low pass filtered interfaces (such as wireless keyfobs or RFID devices). Fully Ethernet 10GBASE-T compliant with direct 'copper' connection between RJ-45 ports, this ensures any test 'hiccups' will be properly exchanged between devices, ie: no hang-ups are undetected, a problem when using fiber optic or other such interfaces. The filter 'appears' to the devices as a couple meter long Ethernet cable.

The Ethernet filtered interface consists of balanced pairs of data lines utilizing proprietary signal phasing techniques, there are no low pass filters on any of the data conductors. Standard RJ-45 Female connectors are used allowing simple and reliable connection to your test devices. The data line filtering passes the Ethernet data while providing rejection of 80 dB to undesired RF wireless signals. Included is a short Ethernet male to male jumper cable. Fully compatible with all PoE devices. Includes two M-M Ethernet cable with RJ-45 connectors.

FEATURES & BENEFITS

- Patented unique design discerns between data and RF signals
- Heavy duty machined aluminum case for reliable shielding
- Extremely wideband operation, from low VHF to microwave

SPECIFICATIONS:

Data Line Balanced Impedance: 100 Ohms typical
Insertion loss: Data lines 5dB, DC resistance 0.1 ohms, 1A, 60V
Isolation in test system from 50 MHz to over 6 GHz, 80 db

DIMENSIONS

Outside: 3.2" H x 3.2" W x 0.8" D 80 x 80 x 20 mm



JRE LAN10G-2 RJ-45 Ethernet Filtered Interface Adapter

- RJ-45 Female Jacks
- Cables included: Ethernet RJ-45 1 meter M-M
- Power capability: 60 VDC at 1 amp. DC resistance each leg, 0.1 ohms max.

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