

What is a Triaxial TRB Connector?

TRB connectors are designed for triaxial cables, providing noise suppression for micro-current measurement and precision measurement equipment. These connectors are optimal for low-level signal connections and balanced line applications, featuring an easy-to-use bayonet lock mechanism for secure coupling.



Product Type	Description
Straight Plug	Connector plug for triaxial cable
Bulkhead Adapter	Receptacle, Jack with nut and washer
Receptacle	Receptacle, Jack
Plug Receptacle	Receptacle, Plug
Flange Adapter	4-hole flange adapter
BNC Conversion	6 types of TRB to BNC conversion adapters

Micro-Current Measurement Challenges

Problems with Micro-Current Measurement

- Conventional coaxial cables are susceptible to noise interference
- Leakage current causes measurement errors
- Insufficient shielding performance for precision measurements

Benefits of TRB Connectors

- Triple shield structure provides high noise resistance
- Minimizes leakage current and improves measurement accuracy
- Secure bayonet lock mechanism ensures stable connection

Triaxial Cable & Connector Features

Triaxial Cable Structure

Adds an intermediate conductor layer and inner sheath between the insulator and outer conductor of a conventional coaxial cable. This structure significantly reduces measurement errors during micro-current measurement, enabling high-precision measurements.

TRB vs BNC Connectors

BNC connectors connect with 2 studs (protrusions) while TRB connectors connect with 3 studs (protrusions). Despite having similar shapes, their internal structures differ, making them incompatible with each other. The 3-stud design provides more secure connections for precision measurements.

Application Areas

Ideal for high-precision measuring instruments, semiconductor testing equipment, medical devices, and scientific research equipment where noise reduction and signal integrity are critical. The triaxial design provides superior performance in environments requiring accurate micro-current measurements.