

Z-Balun QAM





The *Z-Balun QAM* is an essential component of Z-Band's high definition video distribution system. It is located at the receive end of the system and permits a TV, Set Top Box/Cable Box or PC with a Tuner Card to be connected to the system for HDTV over CAT 5e or better cable. The balun is not only an impedance matching device, but serves also as a small self-adjusting amplifier and signal conditioner that senses its distance from the hub, and adjusts its output to assure proper signal level to the TV at distances up to 100 meters. The input to the *Z-Balun QAM* from a wall outlet is connected via an RJ-45 Jack and its output features an F-Connector and an auxiliary RJ-45 Jack for IP application.

Available in free-hanging configurations; a uni-directional (ZBT0010021) capability for RF video only, or a bi-directional (ZBT0010022) capability for video, data, and VOD applications.

Features & Benefits

Automatically senses horizontal Category cable distance as shown by LED indicators on free-hanging balun. Adjusts TV receive level by inserting proper signal conditioning algorithm. Provides unique identification impedance signature to *Z-Balun Distribution REG* for port activation. DATA (DOCSIS)/FSK preamble activates the return path.



Z-Balun QAM

Part #	ZBT0010021
Physical Description	Weight: Approximately 6 ounces Size: 2.8" L x 2.4" W x 1.0" H F-Connector (bottom) (2) -45 Jacks (top) LED distance indicators (bottom)
Power	8 VDC at ½ watt supplied remotely on RJ 45 pins 7&8 via Z-Distribution REG (no local power required)
Electrical Radio Frequency	Impedance matching 100ohm to 75ohm with signature protection to avoid accidental data connection Forward: 5 MHz to 860 MHz (pins 7 & 8) Assures proper TV receive level 0 to +15 dBmV for analog signals and +/-10 dBmV for digital C/N: greater than 43 dB MER: greater than 32 dB
Environment	Operating Temperature: 0 to 55° C Relative Humidity: 5 to 95% Storage Temperature: -40 to 70° C
Agency Standards	FCC Part 15, Subpart B Compliant