



Tunable Loads, Tunable Shorts, and E-H Tuners

QWG/QAT/QWU

Characteristics

- ◆ Full Waveguide Bandwidth
- ◆ Frequency 26.5-220 GHz
- ◆ Precision Micrometer Adjustment



Product Description

QuinStar Technology's series **QWG, QAT and QWU tunable loads, tunable shorts and E-H tuners** are available in nine waveguide bands. They provide full waveguide band coverage and are ideally suited for precision measurements, experimental testing and developmental tuning.

Tunable Loads: Consist of a precision tapered waveguide load coupled to a micrometer drive. Repositioning of the sliding load permits determination of a minimum/maximum VSWR due to the phasing between the VSWR of the load and the VSWR of the unit under test.

Tunable Shorts: Consist of a movable non-contacting choke type short circuit designed to operate with high

electrical stability over the entire waveguide band. A micrometer drive provides smooth accurate positional tuning of one-half wavelength at the lowest operating frequency and a positive locking feature is included.

E-H Tuners: Consist of a hybrid tee section with micrometer drive tunable shorts (described above) in both the E-plane and H-plane arms. These tuners introduce discontinuities into the waveguide transmission line for simultaneous control of both phase and amplitude of the RF reflection coefficient. They can be used as matching devices to cancel reflections in transmission lines or to match detectors, terminations or similar components.

Ordering Information

Model Number → **Q - A 00000**

model prefix ←

- WG = tunable load
- AT = tunable short
- WU = E-H tuner

→ waveguide band designator

- A = Ka-band
- Q = Q-band
- U = U-band
- V = V-band
- E = E-band
- W = W-band
- F = F-band
- D = D-band
- G = G-band