

UHF Loop Coupler

Product Features

- Standard interface: 1-5/8" connector at the primary ports, SMA connector at the (coupled) ports
- 1 kW maximum power at the primary ports
- Operating temperature range of -15° C to +60° C
- 50 ohm nominal impedance
- Custom options include special coupling values and frequency ranges, alternate connector styles, coupling configurations and plating methods



Description and Application

UBS designs and manufactures a variety of directional couplers optimized for accurate power measurements in air-line coaxial transmission lines.

The series of UHF couplers covers all DTV channels from 470 MHz to 860 MHz. They are ideally suited for DTV and wireless applications by virtue of their high power capability, lowest insertion loss, high directivity and excellent matching with the prime line.

The available from stock couplers include models to cover the entire frequency range of 470 MHz to 860 MHz, as well as specialized models perfected for a particular set of DTV channels. These models are available in a single-probe configuration (for monitoring the power flow in one direction) and a dual-probe configuration (for sampling both incident and reflected power), for the standard coupling values of 30 dB, 40 dB and 50 dB.

Product Specifications

Frequency Range ATSC DTV channles: 18 (494 MHz - 500 MHz)

45 (656 MHz - 662 MHz) 73 (824 MHz - 830 MHz)

Configuration Dual-probe, external terminations,

non-silver plated

 Maximum Power (at a primary port)
 1 kW

 Return Loss (at a primary port)
 > 25 dB

 Directivity
 > 30 dB

 Coupling
 50 dB

 Dimensions (with connectors)
 10"x 4.5"x 2.6"

Differisions (with confiectors)

Weight 2 kg

 Interface:
 Primary Line
 Connector: 1-5/8"

 Coupled Ports
 Connector: SMA

(specifications are subject to change without notice)

Ordering Information

LCC-X1-X2-X3-X4-X5-X6

X1 - Nominal coupling value (dB)

X2 - Lower operating frequency (MHz)

X2 - Upper operating frequency (MHz)

X4 - Number of probes (1 for a single-probe, 2 for a dual-probe)

X5 (for custom connector) - Primary port connector

X6 (for custom connector) - Coupled (probe) port connector

VER 1.1 November 25, 2009