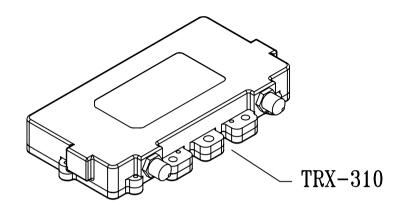
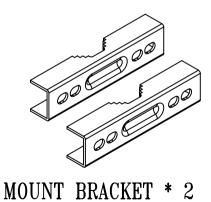
# TRX-310 INSTALLATION GUIDE

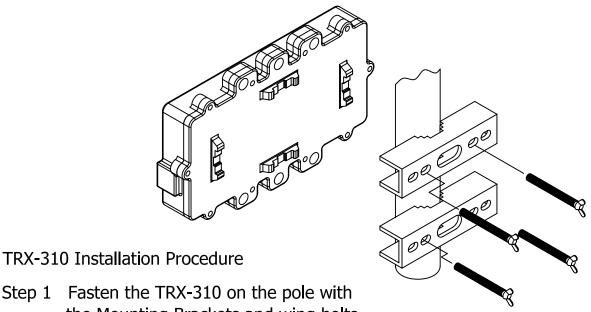








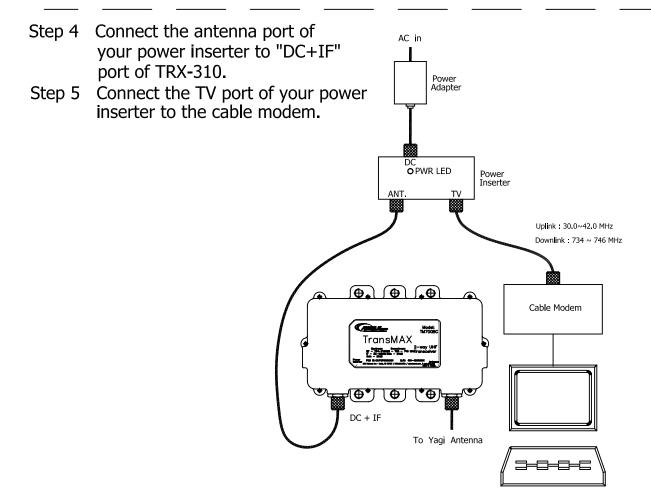
WING BOLT \* 4



Step 1 the Mounting Brackets and wing bolts.

Fix your UHF Antenna on the pole. Step 2

Connect your UHF Antenna to TRX-310 at the Antenna port with a coaxial Step 3 cable of F-type connectors.



## TRX-310

## UHF Band MMDS Transceiver

#### **Overview**

TRX-310 is TSI's latest offering for 2-way wireless broadband Internet application at UHF band. It accepts an IF signal of 30~42MHz from cable modem, upconverts the signal to 704~716MHz and transmits it back to the MMDS headend site.

With its built-in automatic on/off switch, TRX-310 will enter sleep mode to eliminate the broadband noise when there is no data packet transmission. Without exception, TRX-310 embodies the long term stability and reliability common to all TSI products.

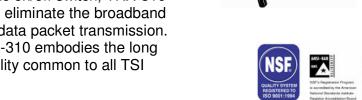
With the integrated downconverter and upconverter, TRX-310 provides the best cost / performance solution for your 2-way MMDS operation.



- QPSK, 16 QAM Transmission Compatible
- 256 QAM Reception Compatible
- Automatic On/Off switch
- Up to 50Km cell coverage
- Low phase noise
- High frequency stability
- Low power consumption
- Meet FCC spectral mask requirement
- Easy installation
- RoHS compliant

### **Application**

UHF Band 2 way MMDS CPE Internet access









# TRX-310

## UHF Band MMDS Transceiver

### **Specifications**

Downstream	
Input frequency	734 ~ 746 MHz
Output frequency	734 ~ 746 MHz
Gain	24 ± 2dB @ 25℃
Noise Figure	5dB typ. 7dB max.
Leakage of Tx to IF	-50dBm min @O/P=+24dBm

Upstream	_
IF Input Center Freq.	30 ~ 42 MHz
RF Output Frequency	704 ~ 716 MHz
IF Input Signal Bandwidth	12 MHz max
Gain	20 ± 2dB
Linear Output Power	+24 dBm typ.
P1dB	+27dBm typical
LO Phase Noise	-85dBc/Hz @ 1KHz -87 dBc/Hz @ 10 KHz -95 dBc/Hz @ 100 KHz
LO Stability	± 10KHz
TX Output Spurious	-37dBc max
TX Output Power Blanking Threshold	-45dBm
TX Switch Latency	< 1.2 micro second

Interface	
RF Port	75 ohm
RF Connector	F-type Female
RF Return Loss	10 dB typ.
IF Port	75 ohm
IF Connector	F-type Female
IF Return Loss	10 dB typ.
IF Spurious Emissions	$\leq$ -85 dBm 734-746MHz $\leq$ -50 dBm from 100-860MHz except above

Power Supply	
Voltage	+18 to +24 VDC
Power Consumption	8 Watt max.
Environment	

Temperature	-30℃~+60℃
Humidity	100% waterproof

Physical	
Dimensions	175 x 116 x 33 mm

Accessories Options	
Power Supply 110V/220V Adapter & Inserter	

Typical value @ 25 ℃, unless otherwise specified. Specifications are subject to change without prior notice. ©2008 TRANSYSTEM INC. all rights reserved.



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#### **FCC Notices**

This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

CAUTION: Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- --Reorient or relocate the receiving antenna.
- --Increase the separation between the equipment and receiver.
- --Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- --Consult the dealer or an experienced radio/TV technician for help.

#### **CAUTION:**

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.