Antech
SATELLITE COMMUNICATIONS

TX-RX
10MHz Switch-Over

RTX0001A

Model Type: **RTX0001A**

This device is proper for:
- 10MHz Reference + 24VDC + L Band for BUC or Outdoor Up-Converter
- 10MHz Reference + 18VDC + L Band for LNB

Equipments that use this reference are the Outdoor BUC or Outdoor UPC0021A BUC and any LNB that needs power supply and 10MHz external reference.
It is possible to set up the inside switch-over system with automatic or manual mode to use the internal 10MHz reference externally, when the external reference is not available.

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General Specification

Mechanical construction:	1U 19" standard rack, 350mm deep
Weight:	2Kg
Temperature:	0°C to 50°C operating -35°C to 70°C storage
Relative humidity:	0 to 90% operating 0 to 98% storage
MTBF:	150000 h
Primary power requirements:	90-240V AC ± 10%, 47Hz to 63Hz, 160W max
Output power for BUC	24VDC 3A max through coaxial female connector with enable/disable from menu
Output power for LNB	
Standard version	18VDC 1A max (standard version) through coaxial female connector with enable/disable from menu
Option	Band selection for Triband LNB B1 12 ± 1 VDC B2 15 ± 1 VDC B3 18 ± 1 VDC (Output voltage is adjustable through the expert menu)
Summary Alarm (RX)	Dry contacts (N.O. or N.C.) through DB9 female connector
Summary Alarm (TX)	Dry contacts (N.O. or N.C.) through DB9 female connector
Serial Interface	RS232 or RS422 (setting through the menu) through DB9 male connector

Electrical Specification

TX Section

Input signal	L Band 850-2100MHz through coaxial female connector
Compression point	+12dBm
L Band attenuation setting	from 0 to 21dB
L Band attenuation line-up	±5 dB (for chain ADJ)
L Band input impedance	50 Ohm @ N connector (on request 75 Ohm @ F connector)
Return loss	>20dB
Insertion loss	<1 dB
BUC Current Alarm	Threshold setting through window from 0 to 3A

RX Section

Output signal	L Band 850-2150MHz through coaxial female connector
Compression point	±10dBm
L Band Output impedance	50 Ohm @ N connector (on request 75 Ohm @ F connector)
Return loss	>20dB
Insertion loss	<1 dB
BUC current alarm	Threshold setting through window from 0 to 1A
Noise Figure	<8dB

External 10MHz Reference

Input impedance	75 Ohm @ BNC connector
Input level	From 0 to 10dBm
Input level threshold	Setting from –1 to 10dBm
Switch-over alarm fault	Automatic or manual (setting through the menu)

Electrical Specification

Inside 10MHz reference

Start-up	10MHz output level within 0.5 seconds
Warm-up	within ±0.03ppm in 5 minutes
Temperature stability	±5ppb max over 0°C to 50°C
Frequency stability	Day 2*10^-10 @ operative temperature Month 5*10^-9 @ operative temperature Year 3*10^-8 @ operative temperature Variation @ different load <1*10^-11
Phase noise	@1Hz -100dBc/Hz @10Hz -130dbc/Hz @100Hz -140dbc/Hz @1KHz -150dBc/Hz @10KHz -155dBc/Hz
Output level	±5dBm ±1db @ output connector
Waveform	sinusoidal
TXCO temperature	reading from menu

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