



Analog Tracking Receiver

Multiple Bands



Shown below is the ATR rear panel:



Key Features

- ❖ Internally synthesized with 1.0 kHz tuning steps
- ❖ Automatic phase-lock loop (PLL) with Quick-Lock™ acquisition (<1sec) and Sideband rejection
- ❖ Tracking Voltage Output: 0-10VDC and -5 to +5 VDC
- ❖ Three predetection bandwidths: 250, 4.0, or 2.5 kHz
- ❖ Dynamic range: 45 dB Std. and 90 dB Optional
- ❖ CW, PM, or BPSK (optional) modulation accommodated
- ❖ Monopulse capability
- ❖ Doppler compensation (extended range optional)
- ❖ Low profile rack mount chassis
- ❖ L, S, C, EC, X, Ku, Ka single and multi-band configurations available
- ❖ Front panel LCD display and keypad
- ❖ Remote controllable via RS-232/422

Product Description

Our Analog Tracking Receivers provide a high quality, cost effective solution for converting the satellite beacon from RF or IF to a DC voltage tracking signal. The ATR is an integrated rack mounted (2RU) receiver chassis.

Band	Input	Frequency - Ghz	VSWR	Image Rejection	Stability
L	75Ω type F	0.95 - 1.75	2 : 1	40 dB	± 5kHz
L	50Ω type N	0.95 - 1.75	2 : 1	40 dB	± 5kHz
S	50Ω type N	2.0 - 2.8	1.5 : 1	40 dB	± 25 kHz
C	50Ω type N	3.4 - 4.2	1.5 : 1	40 dB	± 15 kHz
C Full	50Ω type N	3.4 - 4.8	1.5 : 1	40 dB	± 15 kHz
C High	50Ω type N	4.0 - 4.8	1.5 : 1	40 dB	± 15 kHz
X	50Ω type N	7.25 - 7.75	1.5 : 1	40 dB	± 25 kHz
Ku	50Ω type N	10.7 - 11.5	1.5 : 1	40 dB	± 25 kHz
Ku	50Ω type N	10.7 - 12.25	1.5 : 1	40 dB	± 25 kHz
Ku Full	50Ω type N	10.7 - 13.0	1.5 : 1	40 dB	± 30 kHz
Ku	50Ω type N	10.9 - 11.7	1.5 : 1	40 dB	± 25 kHz
Ku	50Ω type N	11.45 - 12.25	1.5 : 1	40 dB	± 30 kHz
Ku	50Ω type N	11.7 - 12.5	1.5 : 1	40 dB	± 25 kHz
Ku	50Ω type N	12.2 - 13.0	1.5 : 1	40 dB	± 30 kHz
Ka	50Ω SMA	17.00 - 17.8	1.5 : 1	40 dB	± 50 kHz
Ka	50Ω SMA	18.10 - 18.9	1.5 : 1	40 dB	± 50 kHz
Ka	50Ω SMA	19.20 - 20.0	1.5 : 1	40 dB	± 50 kHz
Ka	50Ω SMA	20.20 - 21.0	1.5 : 1	40 dB	± 50 kHz

Physical Data	
Dimensions (in.)	3.5H 19W 22D
Weight (shipping)	23.5 Lbs (28 Lbs.)
Power	90-264 VAC 47-63Hz 200VA
Temperature, operating	0° to 50° C
Temperature, storage	-40° to 50° C
Humidity	0 to 95%

RF Specifications	
Input Total Power Level	-10 dBm max
Input Beacon Level Range	-55 to -100 dBm
Beacon Tuning Step Size	1.0 kHz
Predetection Bandwidth	2.5 kHz, 4.0 kHz, 280 kHz
Signal Strength Linearity	20% min
C/No for Narrowband Acquisition	40 dB-Hz min
C/No for Wideband Operation	61 db-Hz min
Sweep Width	± 40 to ± 150 kHz
Acquisition Time	<1 sec for ± 100 kHz Sweepwidth