

B650 Series X-band Tracking Receiver

INPUT SPECIFICATION	Options
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1.	Input Range:	7.25 – 7.75GHz
2.	Input connector:	N-type
3.	Impedance:	50Ω
4.	Input return loss:	15dB typical
5.	Nominal beacon input level:	-80dBm
6.	Maximum beacon input level:	-70dBm
7.	Maximum aggregate power level:	-30dBm

OUTPUT SPECIFICATION

8.	Range:	±10V DC 0V to 10V DC (*)
9.	Scale:	Logarithmic
10.	Connector:	BNC (also interface connector)
11.	Impedance:	0Ω (ideal voltage source, maximum current 5mA)
12.	Adjustment range:	Output adjustable to 0V for input power levels from -70dBm to -110dBm
13.	Display:	16-character alphanumeric LCD
	dB mode:	-199.9 to +199.9
	Volts mode:	-9.99 to +9.99

TRANSFER CHARACTERISTICS

14.	In/out characteristic:	Log conformal
15.	In/out voltage slope:	2dB/V 0.5 to 4dB/V (*)
16.	Post-detection time constant:	100ms 10ms to 10s (*)
17.	DC voltage adjust:	To 0V for -70dBm to -110dBm
18.	Level meter adjust	To ±199.9 for -70dBm to -110dBm
19.	Step size:	10kHz
20.	Automatic search:	±200kHz ±75kHz to ±1MHz (*)

TRACKING PARAMETERS

21.	PLL noise bandwidth:	2kHz
22.	Threshold for reacquisition of lock:	<43dBHz
23.	Average search time:	<1s

MISCELLANEOUS

24.	Power supply:	115V/230V ±10% 50/60Hz ±10%, 30VA
25.	Mechanical:	1U 19" frame, 400mm
26.	Temperature:	Operating: 0° to 50°C Storage: -40° to 85°C
27.	Relative humidity:	Operating: 0 to 90% Storage: 0 to 95%
28.	Summary alarm:	NO and NC dry relay contacts via rear mounted connector
29.	Summary alarm indication:	Through front panel LED and remote interface
30.	Remote control:	<ul style="list-style-type: none"> ● RS232 or RS422/RS485, connector D-type 9P F ● Serial emulation over TCP/IP, connector RJ45 ● SNMP and HTTP over TCP/IP Ethernet, connector RJ45 Control: beacon frequency Monitor: beacon frequency, output voltage and alarm status

(*) These parameters are not field adjustable. To be specified at time of order.

MODEL TABLE

Input band	PLL 2kHz, threshold <43dBHz ⁽¹⁾	PLL 2kHz, BPSK option threshold <43dBHz ⁽²⁾
7.25 – 7.75GHz	B655	B655A

⁽²⁾ Models recommended for antenna tracking.

⁽³⁾ Models for antenna tracking of NATO / Skynet / DSCS military beacons.