Novella SatComs
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B350 Series
L-band Tracking Receiver

INPUT SPECIFICATION		Options
1. Input Range:	940 – 2,150MHz (check model table)	
2. Input connector:	N-type	
3. Impedance:	50Ω	75Ω (*)
4. Input return loss:	15dB typical	
5. Nominal beacon input level:	-70dBm	
6. Maximum beacon input level:	-60dBm	
7. Maximum aggregate power level:	-20dBm	
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 -60dBm to -100dBm	
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 -60dBm to -100dBm	
18. Level meter adjust	To ±199.9 for -60dBm to -100dBm	
19. Step size:	10kHz	
20. Automatic search:	±200kHz	±75kHz to ±1MHz (*)
TRACKING PARAMETERS		
21. PLL noise bandwidth:	300Hz or 2kHz (check model table)	
22. Threshold for reacquisition of lock:	<35dBHz or 43dBHz (check model table)	
23. Average search time:	<1s for PLL B/W of 2kHz <90s for PLL B/W of 300Hz	
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:	Via RS232/RS485 serial interface Control: beacon frequency Monitor:beacon frequency, output voltage alarm status	

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

MODEL TABLE

Input band	PLL 300Hz, threshold <35dBHz (1)	PLL 2kHz, threshold <43dBHz (2)	PLL 2kHz, BPSK option threshold <43dBHz (3)
940 – 1,750MHz	B350	B355	B355A
940 – 2,150MHz	B351	B356	B356A

(1) Models recommended for antenna and propagation experiments.
(2) Models recommended for antenna tracking.
(3) Models for antenna tracking of NATO / Skynet / DSCS military beacons.