



NEW COMPACT TRACKING RECEIVER

AVAILABLE IN OUTDOOR AND INDOOR PACKAGES

IDEAL FOR TRANSPORTABLE, COMMERCIAL AND MILITARY TERMINALS

Novella SatComs Ltd. launches the latest range of Compact Tracking Receivers for the Satcoms market.

Like all previous Novella tracking products the new compact tracking receivers have been designed to track and measure beacons of all known commercial and military satellites.

The combination of tried and tested PLL techniques, the latest developments in integrated RF technology and the unique beacon search and anti-sideband (ASB) circuitry allows these receivers to re-acquire lock in all circumstances making them ideal for tracking highly inclined orbit satellites where Doppler shift causes lower quality Trackers to fail.

A low threshold of 43dBHz, fast re-acquisition of less than 1s and high linearity make Novella's receivers the preferred choice for small antenna field deployable stations (C,X , Ku and Ka Band) requiring fast automatic satellite acquisition.

They are now the product of choice to track NATO/Skynet/DSCS BPSK modulated beacons and the ideal solution for SNG vehicles requiring fast automatic antenna deployment and satellite acquisition.

Novella receivers are available with interface at 70/140MHz, L, S, C, X, Ku or Ka-band. They are also available in a variety of multiband packages, namely C, X and Ku-bands.

Novella's new tracking receiver is also available as an OEM option embedded in Research Concepts Inc. RC3000 ACU.



www.researchconcepts.com

Outline Specification

- | | |
|--|--|
| 1. Input: | 940 to 1,750MHz |
| Option 1: | 940 to 2,150MHz (*) |
| Option 2: | 875 to 1,750MHz |
| 2. Input attenuator: | 0 to -30dBc (*) |
| 3. Maximum beacon level: | -65dBm (input attenuator set to 0dB) |
| 4. Maximum aggregate input power: | -15dBm (input attenuator set to 0dB) |
| 5. Output voltage: | ±10V dc |
| Option 3: | 0 to +10V dc |
| 6. Output voltage scale: | Log conformal, 2dB/V |
| Option 4: | Single slope, customer defined |
| Option 5: | Customer adjustable (*) |
| 7. Output voltage offset: | Adjustable to 0V for input power levels from -60dBm to -100dBm |
| 8. PLL noise bandwidth: | 2kHz |
| 9. Search bandwidth: | ±100kHz |
| 10. Acquisition time: | < 1 second |
| 11. Threshold for reacquisition: | 43dBHz |
| 12. Level detector: | Coherent, 100ms time constant |
| Option 6: | Coherent, customer defined |
| Option 7: | Squarer-coherent, for BPSK beacons (*) |
| 13. Power supply, | outdoor models: 15 to 24V dc, 300mA |
| indoor models: | 110/220V ac selectable, 50/60Hz, 10W. |
| 14. Communications: | Serial remote and serial local ports, RS232 or RS422/485 configurable. |

(*) Options and/or configurations not available on budget models



Packaging

Novella's new tracking receiver is available in various packages

- Outdoor splash proof aluminium box, 230x135x30mm.
- Outdoor IP67 rated aluminium box, 230x135x30mm.
- Standard 1U 19" indoor chassis, 400mm deep. Fully featured L-band receiver.
- Standard 1U 19" indoor chassis, 200mm deep. Budget L-band receiver.
- Standard 1U 19" indoor chassis, 400mm deep. C, X, Ku or Ka-band interface.
- Standard 1U 19" indoor chassis, 400 to 520mm deep. Multi-band receiver with any combination of C, X, Ku and Ka-band inputs and polarisation selection.
- As OEM option embedded in Research Concepts Inc. RC3000 ACU.

Novella SatComs Ltd,
Parkland Business Centre,
Greengates, Bradford,
BD10 9TQ,
United Kingdom

T +44 1274 615556
F +44 1274 615254
E novella@novella.co.uk
www.novella.co.uk

