Multi Band Cellular-GPS Combination

806-2170 MHz

ITG5000

The Quintet™ offers incredible versatility. It can be used in almost any cellular system, will provide superior performance to externally glass mounted antennas and yet can be mounted quickly and easily inside the vehicle with no external components.

A derivation of the Duet™ and Quadrant™ dual/multi band products, the antenna uses stripline fed slot radiator technology with patch circuits used to introduce multi band performance. Being slightly larger than the multi band Quadrant™, the Quintet™ has been configured to suit not only GSM900 and GSM1800 systems but also covers AMPS, DAMPS and CDMA 800, SMR systems, PCS1900, DCS1800 and UMTS/3G.

The incredible versatility of the ITG5001 is taken one step further with the ITG5000 version which is effectively two antennas in one. This antenna provides global cellular coverage and GPS satellite coverage making it an ideal telematics solution for vehicle

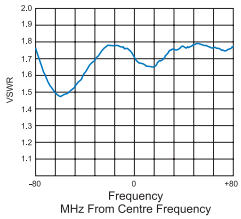
The GPS element is a small ceramic patch antenna with a high performance active amplifier and industry leading noise figure to ensure faster acquisition of multiple satellites. The Quintet™ is equally appropriate for in-vehicle integrated telematics solutions or after market applications calling for both cellular and GPS installations in recreational or industrial vehicles.

Ship the Quintet™ to any market in the world, and the antenna can be installed quickly, easily and yet deliver incredible performance. With a unique mix of vertical and horizontal polarization (as is also shown by the cell sites themselves), the antenna can be mounted at any angle and still deliver optimum performance.

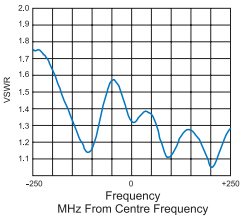
Features:

- The ultimate telematics solution - GPS and cellular in one antenna for almost any market worldwide. (ITG5000)
- Perfect solution for private vehicles, fleet management and vehicle OEMs etc
- Completely internal – simple installation, no external parts

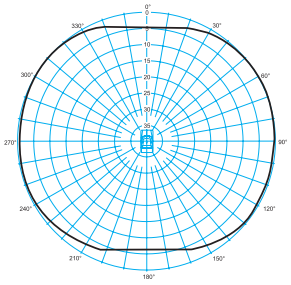
Typical VSWR response CDMA and GSM



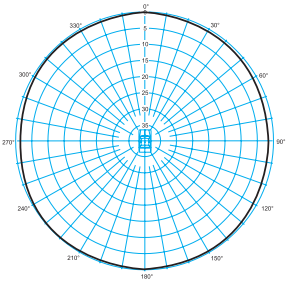
Typical VSWR response DCS, PCS and 3G



Quintet™ vertically placed H-Plane 1.795 GHz



Quintet™ vertically placed H-Plane - 890 MHz



Note: Free space patterns shown

Australian Patent No. 764117, USA Patent No. 6346919, Germany Patent App No. 100 38 831.0, Israel Patent App No. 137716

Multi Band Cellular-GPS Combination

806-890 MHz, 890-960 MHz, 1710-1880 MHz, 1850-1990 MHz, 1910-2170 MHz
ITG5000

Electrical

Model Number	ITG5000 / ITG5001				
Gain *dBi*	1.1		4.4		4.5
Frequency *MHz*	806 - 890	890 - 960	1710 - 1880	1850 - 1990	1910 - 2170
Max Power *W*	10				
Tuned Bandwidth	Entire specified band @ <2.0:1 VSWR				
Tuning	Supplied pre-tuned				

Mechanical

Model Number	ITG5000 / ITG5001
Housing Material	Black ABS/Polycarbonate alloy
Dimensions	90 x 90 x 17mm
Mounting	On glass inside vehicle. Pre-fitted with self adhesive foam tape.
Cable and Connector	Cellular feeder of 5.0m 9014 low loss, fully shielded cable terminated with SMA male and FME nipple (adapters available).
	ITG5000 ONLY - GPS feeder of 5.0m RG174 type cable MCX connector fitted

GPS

Frequency	1575.42 MHz
Operation Temperature	-40 to +85°C
Storage Temperature	-40 to +100°C
System Gain at Fo	28dBi including cable and filter losses
Impedance	50 Ohm
Polarization	RHCP
VSWR	1.5:1
Noise Figure	<1.8 dB max.
Power Input	+2.5Vdc to +12Vdc input, auto switching
Power Consumption	11mA to 13mA (max)
Power Input	Reverse polarity short circuit shutdown
Over-Current	Thermal over-current shutdown >+150°C

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