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## GPS/Telematics Antennas



Laird Technologies is the world-leader in the design and supply of customized performance-critical products for wireless and other advanced electronic applications. Laird Technologies partners with its customers to help find solutions for applications in various industries such as:

Aerospace

Automotive Electronics

Computers

Consumer Electronics

Data Communications

Medical Equipment

Military

Network Equipment

Telecommunications

Laird Technologies offers its customers unique product solutions, dedication to research and development and a seamless network of manufacturing and customer support facilities located all across the globe.

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## Laird Technologies GPS/Telematics antennas provide low profile, high performance and cost effective mobile communication solutions

Laird Technologies GPS/Telematics antennas are low profile, high performance and cost-effective solutions for your mobile communications needs. Available in combinations that cover all primary cellular frequencies plus GPS and Satellite Radio, Laird Technologies GPS/Telematic antennas feature small form factors allowing easy installation virtually anywhere inside or outside a vehicle. Phantom AVL/GPS antennas are currently utilized by ocean bound freighters monitoring temperature and data while withstanding extreme temperatures, salt water and vibration.

With integrated research, tooling, molding, assembly and accelerated life testing facilities around the world, Laird Technologies' engineers will quickly and efficiently create solutions to a multitude of wireless challenges.



### Low profile multi-band GPS GPST821/18503P

- Patented field diversity Phantom® technology ensures uninterrupted voice and data transmissions in urban canyons and rural drop off areas
- 27 dB active GPS patch with high sensitivity for accurate timing and locating
- Low profile design prevents tampering and is visually pleasing

Model	Description	Center Freq	Gain	Overall Height	Radio/GPS Connector	Coax Type
<b>Dual-Band GPS AVL</b>						
GPSD4503P	Standard AVL w/Phantom*	450 - 470 MHz	3 dB-MEG	3.5"	TNC/SMB	RG58
GPSD7463P	Low Profile AVL w/Phantom*	746 - 786 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58
GPSD8063P	Low Profile AVL w/Phantom*	806 - 866 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58
GPSD8063EP	As above w/ext. 1" mounting nut	806 - 866 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58
GPSD8213P	Low Profile AVL w/Phantom*	821 - 896 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58
GPSD8903P	Low Profile AVL w/Phantom*	890 - 960 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58
GPSD9023P	Low Profile AVL w/Phantom*	902 - 928 MHz	3 dB-MEG	1.25"	TNC/SMB	RG58

<b>Tri-Band Low Profile GPS AVL</b>						
GPST821/18503P	Cell/PCS/GPS Low Profile*	821-896 MHz/ 1850-1990 MHz	3 dB-MEG	1.25"	TNC/SMB	RG174
KIT1171-120	Cell/PCS/GPS Low Profile* Adhesive mount	821-896 MHz/ 1850-1990 MHz	3 dB-MEG	1.25"	SMA/SMB	RG174

Other connector options available



KIT1171-120

Adhesive mount option available  
on Low Profile GPS Antennas

## Survivor™ Dual Band GPS antennas

- Highly durable molded housing design survives the harshest of environments and applications - traditional whip with spring options available.
- 26dB active GPS patch antenna provides high performance and sensitivity for accurate locating and timing
- Multiple applications from heavy equipment to luxury automobiles

**NEW**

Model	Description	Frequency	Gain	Overall Height	Connector Type	Coax Type
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### Dual-Band GPS/Land Based Bar Antenna

GPSDB150P	Low Profile Phantom Wideband VHF/GPS	137 - 150 MHz	3 dB-MEG	2.2"	N-Male	RG58
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### Survivor™

GPSDS1370P	Survivor - VHF plus GPS*	137 - 150 MHz	Unity	21.75"	Optional	14'
GPSDS1370PLP	Survivor - Low Profile VHF plus GPS*	137 - 150 MHz	Unity	7.25"	Optional	14'
GPSDS1370G	Survivor - VHF/GPS w/ Magnetic Base*	137 - 150 MHz	Unity	7.25"	Optional	14'
GPSDS7603P	Survivor - 700 MHz + 3 db Gain*	760 - 870 MHz	3 dB	14.285"	Optional	14'
GPSDS8060P	Survivor - 800 MHz + Unity Gain*	806 - 866 MHz	Unity	6"	Optional	14'
GPSDS8063P	Survivor - 800 MHz + 3 db Gain*	806 - 866 MHz	3 dB	14.285"	Optional	14'
GPSDS8065P	Survivor - 800 MHz + 5 db Gain*	806 - 866 MHz	5 dB	26.25"	Optional	14'

\*Add .625" overall height for all P mount models



GPSDS13780GR  
with Magnetic Base  
and Boot Option



GPSDS1370PLP

GPSDS8065P



## GPS Antenna features

- Monitor location with GPS models available in NMO, magnetic, and trunk mount options
- Multiple applications - heavy equipment to luxury automobiles
- Heavy duty spring available on some Survivor models
- GPSDS1370P model is ideal for ORBCOMM® applications

Model	Description	Frequency	Gain	Connector Type	GPS Connector	Coax Length
<b>Internal Mercury™ Tri-Band</b>						
GPST31824/18503	Tri-Band Internal Mercury 3 Volt	AMPS: 824-896 MHz PCS: 1850-1990 MHz GPS: 1575.42 MHz	3.0 dBi	SMA	SMA	17' RG-174
GPST51824/18503	Tri-Band Internal Mercury 5 Volt	Same as above	3.0 dBi	SMA	SMA	17' RG-174
GPST51880/17103	Tri-Band Internal Mercury 5 Volt	AMPS: 880-960 MHz DCS: 1710-1880 MHz GPS: 1575.42 MHz	3.0 dBi	SMA	SMA	17' RG-174

Also available in GSM, DCS and UMTS frequency configurations - other connector and cable options also available.

### Hexband Multiblade Internal GPS Antenna

63708	MultiBlade GPS 3 Volt	AMPS: 824-896 MHz GSM: 880-960 MHz DCS: 1710-1880 MHz PCS: 1850-1990 MHz UMTS: 1920-2170 MHz GPS: 1575.42 MHz	3.0 dBi	SMA	SMA	17' RG-174
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Other connector and cable options also available

### External Mercury™ Tri-Band

GPST3E824/18503	Tri-Band External Mercury 3 Volt	AMPS: 824-896 MHz PCS: 1850-1990 MHz GPS: 1575.42 MHz	3.5 dBi	SMA	SMA	17' RG-174
GPST5E824/18503	Tri-Band External Mercury 5 Volt	Same as above	3.5 dBi	SMA	SMA	17' RG-174
62107	Tri-Band External Mercury Through-Hole-Mount - 3 Volt	AMPS: 824-896 MHz PCS: 1850-1990 MHz GPS: 1575.42 MHz	3.5 dBi	SMA	SMA	17' RG-174
62108	Tri-Band External Mercury Through-Hole-Mount - 5 Volt	Same as above	3.5 dBi	SMA	SMA	17' RG-174

Other connector and cable options available



GPST31824/18503

## Internal Mercury™ Tri-band GPS antennas

- Keeps track of your fleet while providing multiple radio frequency wireless communications.
- Available in AMPS, PCS, DCS, GSM and UMTS tri-band configurations
- Low-profile stealth design installs on dashboards or rear decks
- Measures only 5" L x 2.5" W x .5" H

**NEW**

## Hexband Multiblade Internal GPS Antenna

- Same performance as original Internal Mercury PLUS 6 Band flexibility with GPS
- Features more compact housing - only 5.4" L x 1.25" W x .5" H



## External Mercury™ Tri-band GPS antenna:

- Low-profile weatherproof design is an excellent solution for trucks, trailers and tall vehicles
- Transmits voice and data while measuring only 5.625" x 5.125" x .875"
- Sleek durable housing mounts on a ground plane or no ground plane surface



GPST3E824/18503

## Multi-Band MicroBlade™

- Dual and Quad band models available
- Antennas measure only 4.94" x 1.34" x .25"



**Model GPSQ  
combines both  
Quadband and GPS antennas**

## Standard NMO Mount GPS antennas GPSU15M

- Small Size - 1½" tall x 2 5/8" diameter
- 3 or 5 Volt bias
- Gold Plated Pushpin Contact



## Trunk Mount GPS and Add On Bracket TM8GPS GPSNMOAO



Model	Description	Frequency	Gain	Connector Type	Coax Length
<b>Dual and Quad-Band Microblade™ with and without GPS</b>					
MAF90001	MicroBlade Dual Band	AMPS: 824-896 MHz GSM: 880-960 MHz	2.3 dBi 2.3 dBi	SMA	3m RG-174
MAF90002	MicroBlade Dual Band	DCS: 1710-1880 MHz PCS: 1850-1990 MHz	2.1 dBi 3.1 dBi	SMA	3m RG-174
MAF90004	MicroBlade Dual Band	As above		Straight MCX Plug	9"
Microblade1 (CAF94837)	MicroBlade QuadBand	AMPS: 824-896 MHz GSM: 880-960 MHz DCS: 1710-1880 MHz PCS: 1850-1990 MHz	2.3 dBi 2.3 dBi 2.1 dBi 3.1 dBi	SMC	5'
Microblade1W	MicroBlade Antenna Waterproof	Same as above		SMC	5'
GPSIM15 (CAF94827)	Internal GPS Antenna - 3 volt	GPS: 1575.42 MHz	2.5 dBi	SMA	5' RG-174
Also available in a 5 volt version					
GPSQ (CAF94864)	MicroBlade1 and GPSIM15 antennas	Same as above		SMC	5'

Model	Description	Center Freq	Gain	Overall Height	Connector Type	Coax Type
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### NMO Mountable

GPSU15M	NMO GPS - 3 or 5 Volt Bias	1575.42 MHz	26 dB	1.5"	NMO	NA
GPSUW15M	NMO GPS - 3 or 5 Volt Bias - White	1575.42 MHz	26 dB	1.5"	NMO	NA

### Trunk Mount GPS

TM8GPS	Trunk Mount GPS	1575.42 MHz		.75"		
TMB8GPS	Black Trunk Mount GPS	1575.42 MHz		.75"		

### GPS Add On Bracket

GPSNMOAO	Bright Stainless Bracket with GPS	1575.42 MHz		.75"		17' - RG174
GPSBNMOAO	Black Stainless Bracket with GPS	1575.42 MHz		.75"		17' - RG174



Model	Description	Center Freq	Gain	Overall Height	Connector Type	Coax Type
<b>Standard AVL</b>						
GPS1575P	Low Profile AVL *	1575.42 MHz	26 dB	1.25"	TNC-Male	RG174
*Add .625" overall height for all P mount models						
<b>Micro GPS Magnetic and Adhesive Base</b>						
GPS15MGBNC	Micro GPS Antenna	1575.42 MHz		.43"	BNC	15' RG174/U
GPS15MG SMA	Micro GPS Antenna	1575.42 MHz		.43"	SMA	15' RG174/U
GPS15MG SMB	Micro GPS Antenna	1575.42 MHz		.43"	SMB	15' RG174/U
GPS15MG TNC	Micro GPS Antenna	1575.42 MHz		.43"	TNC	15' RG174/U
<b>GPS Glass Mount Antenna</b>						
GPS15GLSM	GPS Glass Mount Antenna	1575.42 MHz	25 dB	1.25"	SMA	15' - RG316
<b>GPS Antenna + Receiver</b>						
63706	GPS Antenna + Receiver	1575.42 MHz	2.0 dBi	1.25"	PS2	Mult. options
63742	GPS Antenna + Receiver	1575.42 MHz	2.0 dBi	1.25"	USB	Mult. options
<b>GPS Receiver Module</b>						
63745	GPS Receiver Module	1575.42 MHz	2.0 dBi	.3"	USB & PS2	Mult. options

**NEW**  
**Micro GPS**  
**GPS15MG SMB**

- Very Small Size -  
Approx. 1.61" L x 1.42" W x .43" H
- Flexible 3 and 5 volt operation
- Bottom or side exit
- Water proof
- Antenna provided with both magnetic and adhesive base options



**NEW**  
**GPS Glass Mount Antenna**  
**SPS15GLSM**

- Installs behind rearview mirror for covert installation
- Antenna tuned for interior glass mount

**Low Profile GPS antenna**  
**GPSU1575P**

- Low profile - 1.5" tall
- P mount



**NEW**  
**GPS Antenna + Receiver**

- Low-profile weatherproof design for interior or exterior mounting
- Magnet, adhesive and velcro mounting options
- Features SiRFstarIII™ chip with exceptional sensitivity and accuracy
- USB or PS2 Connector



**NEW**  
**GPS Receiver Module**

- 20 channel GPS receiver
- 200,000 effective correlators for fast TTFF
- Built-in WAAS/EGNOS Demodulator
- Support NMEA-0183 v2.2 data protocol and SiRF binary code



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