multiband technologies

antennas and modems for the satellite tracking & remote monitoring industry

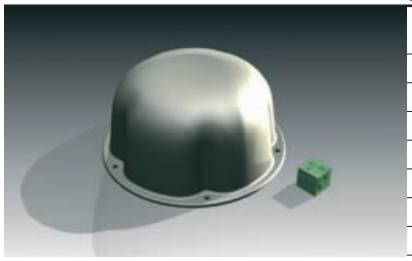
www.multiband-technologies.com

ORBCOMM ANTENNA RANGE

Multiband Antennas are the leading providers of cutting edge **Orbcomm antenna solutions**. Focusing on **small footprint**, **low profile** combination **antennas** our **Orbcomm** designs can be **off-the-shelf** or integrated into your hardware device. Listed below are 5 **great products** and overleaf we are launching 2 great **new products** available Q4 2008.

ORBCOMM®

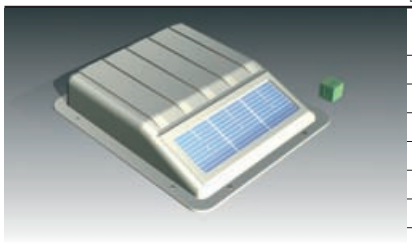
FLATKOOK TC



ELECTRICAL SPECIFICATION	ORBCOMM	GPS	GSM (optional)	WLAN (optional)
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz	824-960MHz 1710-1990MHz	2.4 GHz
Nominal Gain (exl.cable)	-2.5 dBi	26 dBi	4.5 dBi	0dB
Max. Axial Ratio	-	4 dB	-	-
VSWR	Tx< 2.5:1	< 2 :1	Tx< 2.5:1	<2:1
Rated power	10W	1 W	10 W	5 W
Polarisation	Linear	RHCP	Linear	Linear
Voltage	-	3-5 V	-	-
Isolation/Decoupling	12dB	12dB	12dB	12dB

MECHANICAL DATA: Temp: -40°C to +85°C, outside this range antenna performance can be expected to degrade, Performance: 70% relative to a 1/2 wave and is effected by 1-groundplane size, 2-grounding and 3-cable lengths.The antenna needs to be installed on a metal surface, performance will vary unless groundplane is stable. The suggested minimum groundplane is 18"x18" however, the antennas can be tuned to work on smaller groundplanes. Cable and connector options available. Dimensions - D189mm x H100mm

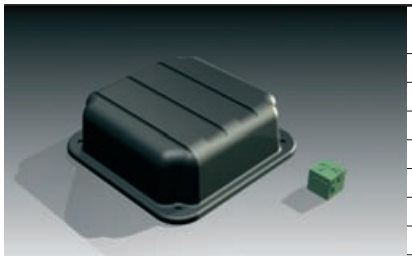
Solar Wedge



ELECTRICAL SPECIFICATION	ORBCOMM	GPS	GSM (optional)	WLAN (optional)
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz	824-960MHz 1710-1990MHz	2.4 GHz
Nominal Gain (exl.cable)	-4.5 dBi	26 dBi	4.5 dBi	0dB
Max. Axial Ratio	-	4 dB	-	-
VSWR	Tx< 2.5:1	< 2 :1	Tx< 2.5:1	<2:1
Rated power	10W	1 W	10 W	5 W
Polarisation	Linear	RHCP	Linear	Linear
Voltage	-	3-5 V	-	-
Isolation/Decoupling	12dB	12dB	12dB	12dB

MECHANICAL DATA: Temp: -40°C to +85°C, outside this range antenna performance can be expected to degrade, Performance: 40% relative to a 1/2 wave and is effected by 1-groundplane size, 2-grounding and 3-cable lengths.The antenna needs to be installed on a metal surface, performance will vary unless groundplane is stable. The suggested minimum groundplane is 18"x18" however, the antennas can be tuned to work on smaller groundplanes. Cable and connector options available. Dimensions - L359mm x W279mm x H59m. Solar Panel 1.25W

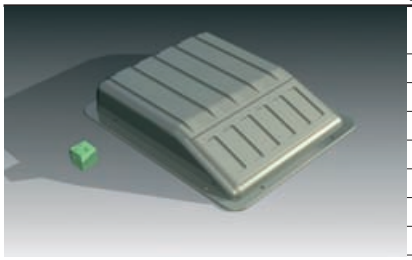
RIBBIT



ELECTRICAL SPECIFICATION	ORBCOMM	GPS	GSM (optional)	WLAN (optional)
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz	824-960MHz 1710-1990MHz	2.4 GHz
Nominal Gain (exl.cable)	-4.5 dBi	26 dBi	4.5 dBi	0dB
Max. Axial Ratio	-	4 dB	-	-
VSWR	Tx< 2.5:1	< 2 :1	Tx< 2.5:1	<2:1
Rated power	10W	1 W	10 W	5 W
Polarisation	Linear	RHCP	Linear	Linear
Voltage	-	3-5 V	-	-
Isolation/Decoupling	12dB	12dB	12dB	12dB

MECHANICAL DATA: Temp: -40°C to +85°C, outside this range antenna performance can be expected to degrade, Performance: 40% relative to a 1/2 wave and is effected by 1-groundplane size,2-grounding and 3-cable lengths.The antenna needs to be installed on a metal surface, performance will vary unless groundplane is stable. The suggested minimum groundplane is 18"x18" however, the antennas can be tuned to work on smaller groundplanes. Cable and connector options available. Dimensions - L189mm x W189mm x H63mm

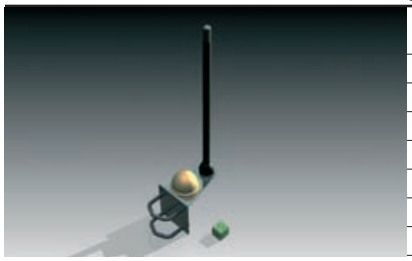
MSA Wedge



ELECTRICAL SPECIFICATION	ORBCOMM	GPS	GSM (optional)	WLAN (optional)
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz	824-960MHz 1710-1990MHz	2.4 GHz
Nominal Gain (exl.cable)	-4.5 dBi	26 dBi	4.5 dBi	0dB
Max. Axial Ratio	-	4 dB	-	-
VSWR	Tx< 2.5:1	< 2 :1	Tx< =2.5:1	<2:1
Rated power	10W	1 W	10 W	5 W
Polarisation	Linear	RHCP	Linear	Linear
Voltage	-	3-5 V	-	-
Isolation/Decoupling	12dB	12dB	12dB7	12dB

MECHANICAL DATA: Temp: -40°C to +85°C, outside this range antenna performance can be expected to degrade, Performance: 40% relative to a 1/2 wave and is effected by 1-groundplane size, 2-grounding and 3-cable lengths.The antenna needs to be installed on a metal surface, performance will vary unless groundplane is stable. The suggested minimum groundplane is 18"x18" however, the antennas can be tuned to work on smaller groundplanes. Cable and connector options available. Dimensions - L359mm x W279mm x H59mm

M3WB/NEMO



ELECTRICAL SPECIFICATION	ORBCOMM	GPS
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz
Nominal Gain (exl.cable)	-3 dBi	26 dBi
Max. Axial Ratio	-	4 dB
VSWR	Tx<= 2.5:1	< 2 :1
Rated power	10W	1 W
Polarisation	Linear	RHCP
Voltage	-	3-5 V
Isolation/Decoupling	>20dB	>20dB

MECHANICAL DATA

Temp: -30°C to +70°C. Performance: 60% relative to a 1/2 wave. No groundplane required. Stainless steel or galvanised steel double bracket can be supplied for mounting TNC female bulkhead as standard -No options. Whip length 400mm, GPS 65mm diam x H30mm

Satellite Antennas & Modems | Michael Kenny | mkenny@multiband-antennas.com | tel +48 604 675649
UK and Ireland Antennas and Filters | Martin Jarvis | mjarvis@multiband-antennas.com | tel +44 7989 392623
Logistics and Sales Administration | Kinga Siejewicz | kinga@multiband.eu | tel +48 22 6223209

webb industries

multiband technologies

antennas and modems for the satellite tracking & remote monitoring industry

www.multiband-technologies.com

ORBCOMM ANTENNA RANGE

ORBCOMM®

Multiband Antennas are introducing 2 great **new antenna designs** for use on **Heavy Plant & Equipment**. The antennas, co-developed with the **Morey Corporation** (USA) and **Webb Industries** (RSA), will be **available in Q4 08** with a limited number being set aside for sampling.
If you'd like to know more about the antennas please feel free to make contact with Michael Kenny mkenny@multiband-antennas.com

BENEFITS

- High Orbcomm Performance - 60% (T Ribbit) & 70% (MidiBar) relative to a 1/2 wave whip
- Combination, small footprint antennas - **Orbcomm GSM GPS Wifi**
- Side or bottom fed cable option - **IP66 Gland**
- **Magnetic Mount** option - 4 x rare earth magnets
- Isolation option - rubber baseplate sock
- Form factor option - **8"8"x3" ot 3"x16"x3"**
- **Installation bracket option** - 12"x 12" L-shaped metal plate for Ribbit

Co-developed with

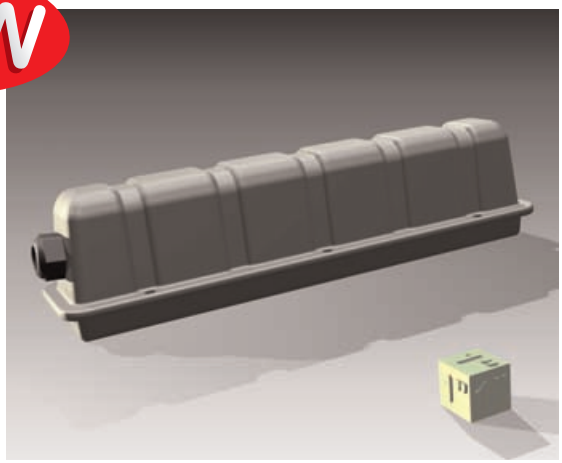
MOREY

T-RIBBIT

NEW

MIDIBAR

NEW



ELECTRICAL DATA

	ORBCOMM	GPS	GSM (optional)	WLAN (optional)
Frequency Range	Rx 137-138 MHz Tx 148-150.05 MHz	1575 MHz	824-960MHz 1710-1990MHz	2.4 GHz
Nominal Gain (exl.cable)	-3.5 dBi	26 dBi	4.5 dBi	0dB
Max. Axial Ratio	-	4 dB	-	-
VSWR	Tx< 2.5:1	< 2 :1	Tx< =2.5:1	<2:1
Rated power	10 W	1 W	10 W	5 W
Polarisation	Linear	RHCP	Linear	Linear
Voltage	-	3-5 V	-	-
Isolation/Decoupling	12dB	12dB	12dB	12dB

MECHANICAL DATA

Temp: -40°C to +85°C, outside this range antenna performance can be expected to degrade,
Performance: 60% (Ribbit) & 70% (MidiBar) relative to a 1/2 wave reference and is effected by 1-groundplane size, 2-grounding and 3-cable lengths.The antenna needs to be installed on a metal surface, performance will vary unless groundplane is stable.
The suggested minimum ground is T-Ribbit 18"x18" MidiBar 22"x10", however the antennas can be tuned to work on smaller groundplanes. Cables and connector options available.
Dimensions T-Ribbit L189mm x W189mm x H81mm, Midibar L405mm x W85mm x H75mm

Satellite Antennas & Modems | Michael Kenny | mkenny@multiband-antennas.com | tel +48 604 675649
UK and Ireland Antennas and Filters | Martin Jarvis | mjarvis@multiband-antennas.com | tel +44 7989 392623
Logistics and Sales Administration | Kinga Siejewicz | kinga@multiband.eu | tel +48 22 6223209

webb industries