

# Antennas

- TENTA-10
- TENTA-11
- TENTA-12
- AGGRESSOR-21

## ▶ Base Station antenna, TENTA-10

This extraordinary fiberglass antenna is excellent for its quality and value. Its advanced design aims for long range reception and its ground plane ensures maximum performance.

## ▶ VHF Antenna, TENTA-11

Built for tough environments, the TENTA-11 antenna completes AIS's VHF requirements and it may also be used with other VHF ready devices. This fiberglass antenna is highly sensitive and has a notable high performance.

## ▶ Combo Antenna, TENTA-12

Saving space on boat!?! TENTA-12 antenna is the right choice as it combines both GPS and VHF antennas into just one. It is space saving and budget friendly by avoiding the needs of buying two antennas. Not to mention it makes your vessel roof more elegant.

## ▶ GPS Antenna, AGGRESSOR-21

AGGRESSOR-21 is a maritime GPS antenna designed for the tough marine environment. This antenna enables the required GPS function for AIS systems, chartplotters, and other navigational devices. Many AMEC devices are GPS ready, simply connect this GPS antenna to see your vessel location, speed, and other information.

### TENTA-10 FEATURES

- High gain VHF antenna
- Suitable for AIS base station

### TENTA-11 FEATURES

- Maritime environment VHF antenna
- 100% compliant with all AMEC AIS devices

### TENTA-12 FEATURES

- Space-saving installation
- Ideal for AIS AtoN

### AGGRESSOR-21 FEATURES

- Built-in LNA (Low Noise Amplifier)
- Compliant with IEC60945

# SPECIFICATIONS

## ► BASE STATION ANTENNA, TENTA-10

### ELECTRICAL

Frequency Range	156 MHz ~ 162 MHz
Gain	6.5 dBi
VSWR	1.5 max
Impedance	50Ω
Connector	PL-259 (female)

### ENVIRONMENTAL

Operating Temperature	-30°C~75°C
Storage Temperature	-30°C~75°C
Operating Humidity	95% RH at 55°C

### PHYSICAL

Weight	1.6 kg (w/o mount)
Dimension	25 mm (ψ) x 3,700 mm (L)

## ► VHF ANTENNA, TENTA-11

### ELECTRICAL

Frequency Range	156 MHz ~ 163 MHz
Gain	2.86 dBi
Polarization	Vertical
VSWR	1.5 max
Impedance	50Ω
HPB	65.77 degree
FBR	1.81 dB

### ENVIRONMENTAL

Operating Temperature	-30°C~75°C
Storage Temperature	-30°C~75°C
Operating Humidity	95% RH at 40°C

### PHYSICAL

Dimension	36 mm (ψ) x 1,200 mm (L)
Weight	860g (w/o mount)
Color	White
Connector	PL-259 (female)

## ► COMBO ANTENNA, TENTA-12

### VHF ANTENNA

Frequency Range	156 MHz ~ 162 MHz
Polarization	Vertical
VSWR	1.2 typical (1.5 max)
Max Gain	2.86 dBi
Average Gain	-1.04 dBi
HPB	66.75 degree
FBR	1.81 dB
Impedance	50Ω

### GPS ANTENNA

Frequency Range	1575.42 MHz ± 1.023 MHz
Bandwidth	10 MHz min.
(10 dB return loss)	
Gain @ Zenith	5.0 dBi typical
Gain @ 10°Elevation	-1.0 dBi min
Axial Ratio	3.0 dB typical
Polarization	RHCP
	(Right Handed Circular Polarization)

### LNA (Low Noise Amplifier)

Center Frequency	1575.42 MHz ± 1.023 MHz
Gain	27 dB typical @ 3.3V
Noise Figure	2.0 max
Output VSWR	2.0 max
DC Power Input	2.7 ~ 5.1 V
Power Consumption	12mA @ 3.3V / 14mA @ 4V / 18mA @ 5V
Impedance	50 Ω

### ENVIRONMENTAL

Operating Temperature	-30°C~75°C
Storage Temperature	-30°C~75°C
Operating Humidity	95% RH at 40°C

### PHYSICAL

Dimension	34 mm (ψ) x 1,680 mm (L)
Weight	2 kg (w/o mount)
Color	White
VHF Connector	PL-259 (female)
GPS Connector	TNC (female)

## ► GPS ANTENNA, AGGRESSOR-21

### ELECTRICAL (GPS ANTENNA)

Center Frequency	1575.42 MHz ± 2 MHz
Bandwidth	10 MHz
VSWR	1.2 typical (1.5 max)
Axial Ratio @ Zenith	3.0 dB typical
Gain @ 10°Elevation	-1.0 dBi typical
Polarization	RHCP
	(Right Handed Circular Polarization)

### LNA (Low Noise Amplifier)

Frequency	1575.42 MHz
Gain	28 dB typical @ 3.3V
VSWR	1.92 max
Noise Figure	1.5 dB typical
Out-Band Attenuation	20 dB min @ fc ± 50 MHz
DC Power Input	3 ~ 5 V
Power Consumption	4.8mA @ 2.7V / 6mA @ 3.3V / 10.43mA @ 5V

### ENVIRONMENTAL

Operating Temperature	-30°C~75°C
Storage Temperature	-30°C~75°C
Operating Humidity	95% RH at 40°C
Rain and Spray	Compliant with IEC 60945
Vibration	Compliant with IEC 60945
Corrosion (Salt Mist)	Compliant with IEC 60945

### OVERALL PERFORMANCE (GPS ANTENNA & LNA)

Frequency	1575.42 MHz
Gain	30 dB typical
Noise Figure	1.5 dB typical
Axial Ratio @ Zenith	3 dB typical
VSWR	1.2 typical (1.5 max)
Impedance	50Ω

### PHYSICAL

Construction	Hermetically sealed, fully waterproof
Dimension	90.5 mm (D) x 108.5 mm (H)
Mounting	92 mm (L) x 60 mm(W)
Weight	105 g (w/o cable and mounting)
Connector	TNC Male
Cable Type	RG-58
Cable Length	10M

Note: Specifications are subject to change without prior notice.



**Alltek Marine Electronics Corporation**  
7F, No. 605, Rueli Guang Rd., Neihu, Taipei, Taiwan 114  
Tel: +886-2-2627-1599 Fax: +886-2-2627-600  
[www.alltekmarine.com](http://www.alltekmarine.com)

The AIS Specialists

### Sales Contact

For more information, please contact at your local sales representative or Alltek Marine:  
[sales@alltekmarine.com](mailto:sales@alltekmarine.com)

Distributor/Agent		Martin Angeli Director
ARGENTINA	MOBILIS Mar and Air Equipment	AtoNsys Aids to Navigation Systems
	AUSTRALIAN MARINE SYSTEMS	
URUGUAY	Vega	
La Coyauda 2480 (1713) Pque. Leloir Bs.As. Argentina		
Tel + 54 11 4621 3270		
Mov + 54 11 116538 3270		
martinangeli@atonsys.com.ar		
www.atonsys.com.ar		