

# TRANSFORMING IDEAS INTO FUTURE



**ANTENNAS** 



**ACCESSORIES** 



OUTDOOR ENCLOSURES



MOUNTING HARDWARES



AC/DC UPSs





Technology for professional links



### CONTENT

**ANTENNAS** 

5.8 GHz SOLUTIONS LICENSED BAND SOLUTIONS

**ACCESSORIES** 

**OUTDOOR ENCLOSURES** 

MOUNTING HARDWARES

AC/DC UPSs

### **ANTENNAS**

#### **OPERATING FREQUENCIES**

- 0.806 to 2.200 GHz 4.900 to 5.875 GHz

- 1.425 to 1.535 GHz 5.250 to 5.875 GHz
- 2.000 to 2.300 GHz
  2.570 to 2.620 GHz
  5.500 to 6.425 GHz
  6.425 to 7.125 GHz
- 2.570 to 2.620 GHz 3.700 to 4.300 GHz 4.400 to 5.000 GHz 10.000 to 11.700 GHz





Technology for professional links

Transforming ideas into future

Since 2003, we have sought to bring people together through innovative and sustainable solutions within telecommunications market. We manufacture antennas and accessories, fully designed to increase performance. This concept is reinforced throughout the company, from effective customer service to constant development researches. Our focus is to serve the client on a high-qualified way developing new products with the latest technology. Quality is one of our foundations; we are certified with ISO 9001:2015 and offer a 3 years warranty in all our antennas.



### **31** distributors

**+ 3.000** satisfied customers

+ 100 products

15 years

+40.000 links installed

**4** years **ISO** 9001 certification

+80.000 manufactured antennas

STRONG QUALITY POLICY











### 5.8 GHz SOLUTIONS

### **ANTENNAS**



- · Dish Antenna
- · Parabolic Shielded Antenna
- Ultra High Performance Parabolic Antenna
   Asymmetrical Horn Antenna
- Wide Band Asymmetrical Horn Antenna







### **FLEXIBILITY**

Complete range of standardized solutions and accessories to meet all your needs



**DURABILITY**High durability and very low maintenance requirements







### **ANTENNAS**

#### Dish Antenna

Generally used in low interference places, this product has an excellent cost-benefit ratio. It has good bandwidht, is suitable for point-to-point solutions and provides more stable links with maximum throughput over short or long distances.



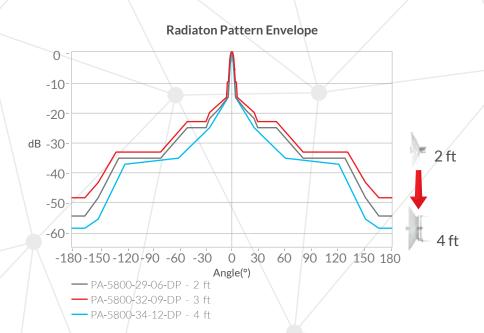








	PA-5800-22-06-DP-ST	PA-5800-29-06-DP	PA-5800-32-09-DP	PA-5800-34-12-DP	
DIAMETER	2 ft	2 ft	3ft	4 ft	
GAIN	29 dBi	29 dBi 32 dBi		35 dBi	
FREQUENCY	FREQUENCY 4.900 GHz to 5.875 GHz		4.900 GHz to 5.875 GHz	Hz 4.900 GHz to 5.875 GHz	
POLARIZATION	Dual (V/H)	Dual (V/H)	Dual (V/H)	Dual (V/H)	
ARMORED BOXES	Not compatible	Compatible	Compatible	Compatible	
ACCESSORIES	Fixing kit	Pigtails and Fixing kit	Pigtails and Fixing kit	Pigtails and Fixing kit	





#### Parabolic Shielded Antenna

In high interference places, this antenna offers a higher radiation efficiency due to its lateral shielding. The radome increases life cycle and link performance on rainy days. It provides more stable links with maximum throughput and suppressed secondary lobes at levels below -40 dB of isolation. The antenna can be used with ALGcom's Armored Boxes, guaranteeing protection and isolation for the radio.













	PS-5800-22-03-DP	PS-5800-29-06-DP	PS-5800-32-09-DP	PS-5800-34-12-DP	PS-5800-37-18-DP	
DIAMETER	1ft	2 ft	3 ft	4 ft	6 ft	
GAIN	23.9 dBi	30.1 dBi	30.1 dBi 33.5 dBi		38.2 dBi	
FREQUENCY	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz	
		Dual (V/H) or Slant (+/-45°)	Dual (V/H) or Slant (+/-45°)			

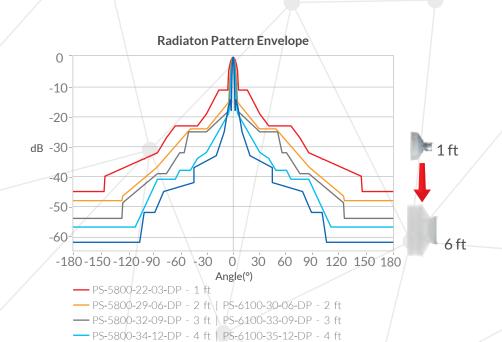
	PS-6100-30-06-DP	PS-6100-33-09-DP	PS-6100-35-12-DP	PS-6100-38-18-DP	
DIAMETER	2.ft	3 ft	4 ft	6 ft	
GAIN	30.3 dBi	33 dBi	35 dBi	38.5 dBi	
FREQUENCY	5.500 GHz to 6.425 GHz				
POLARIZATION	Dual (V/H) or Slant (+/-45°)				







Armored boxes coupling



- PS-5800-37-18-DP - 6 ft / PS-6100-38-18-DP - 6 ft



### **Ultra High Performance Antenna**

In very high interference places, this is the state-of-the-art antenna, with the highest shielding in the market. The ultra-efficient shield combined with the RF absorber foam and a new lens technology guarantee suppressed secondary lobes at levels below -50 dB. It also has robust mounting hardware that is a reference in the telecom segment.



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v	197	
w		



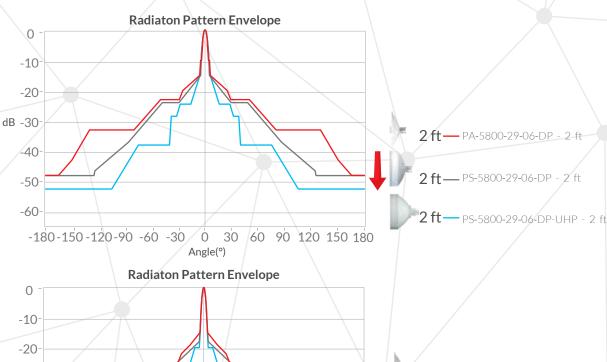
		PS-5800-29-06-DP-UHP	PS-5800-32-09-DP-UHP
/	DIAMETER	2 ft	3 ft
	GAIN	29.5 dBi	32.5 dBi
-	FREQUENCY	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz
	POLARIZATION	Double (V/H) or Slant (+/-45°)	Double (V/H) or Slant (+/-45°)

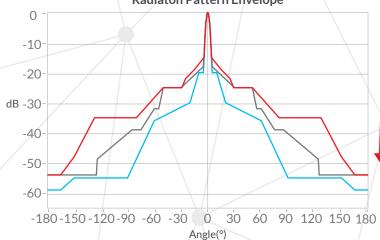
SLANT POLARIZATION +/- 45°

Greater flexibility in double polarized connections with possibility of V / H or +/- 45° installation



### Comparison between models





**3 ft —** PA-5800-32-09-DP - 3 ft

**3 ft** — PS-5800-32-09-DP - 3 ft

3 ft — PS-5800-32-09-DP-UHP - 3 ft



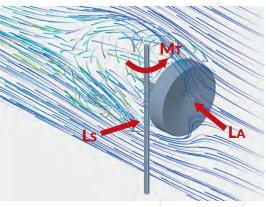
#### Wind Load

SIZE	MODEL	(La) FRONT	(N)	(Ls) SIDE	(N)	(M <sub>T</sub> ) TORSOR	(Nm)
		110 km/h 68 mph	200 km/h 124 mph	110 km/h 68 mph	200 km/h 124 mph	110 km/h 68 mph	200 km/h 124 mph
1ft	PS UHP	90.6 90.6	300.0 300.0	38.3 36.6	126.8 121.2	16.3 16.3	54.0 54.0
2ft	PA PS UHP	291.1 266.3 266.3	964.0 881.9 881.9	86.0 132.3 105.0	284.7 438.2 347.8	52.4 47.9 105.2	173.5 158.7 348.4
3ft	PA PS UHP	533.5 476.2 476.2	1766.7 1576.8 1576.8	151.4 278.6 262.6	501.2 922.4 869.5	96.0 151.0 188.1	318.0 499.8 622.8
4ft	PA PS	883.0 889.9	2923.7 2946.6	175.9 380.0	582.4 1258.2	308.2 310.6	1020.4 1028.4
6 ft	PS	1970.2	6523.6	1064.8	3525.8	535.9	1774.4

PA = Dish Antenna

PS = Parabolic Shielded Antenna

UHP = Ultra High Performance Antenna



La = Axial Load (N)

Ls = Side Load (N)

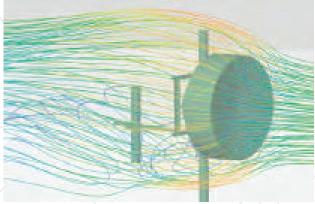
MT = Twisting Moment (Nm)

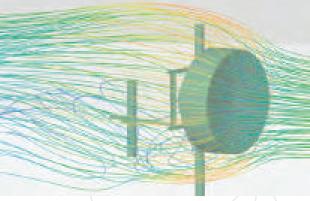
110 km/h = Operation Wind

3D Radiation Pattern Simulation

200 km/h = Survival Wind

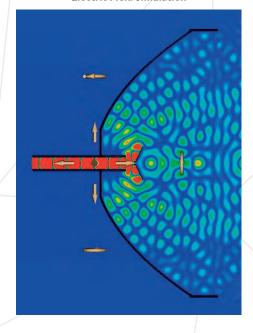
#### **Computation Fluid Dynamics Analysis**





**Electric Field Simulation** 







### Asymmetrical Horn Antenna

It provides double coverage with the same gain as conventional panels. It has excellent shielding properties that ensure secondary lobes reduction and high isolation against noise.









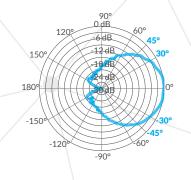
	PD-5800-15-60-DP	PD-5800-15-60-DP-STS	PD-5800-15-60-D-STN		
GAIN	15 dBi	15 dBi	15 dBi		
FREQUENCY	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz	5.250 GHz to 5.875 GHz		
POLARIZATION Dual (V/H)		Dual (V/H)	Dual (V/H)		
ANGLE	90°	90°	90°		
CONNECTION	CONNECTION SMA Female Reverse		<b>DNNECTION</b> SMA Female Reverse SMA Female Reverse		N Female
ARMORED BOXES	Compatible	Not compatible	Not compatible		

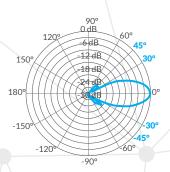


#### HORIZONTAL RADIATION PATTERN

#### **VERTICAL RADIATION PATTERN**

#### **FREQUENCY REUSE**







Waveguide Based technology



CONVENTIONAL PANELS

MORE COVERAGE WITH THE SAME GAIN



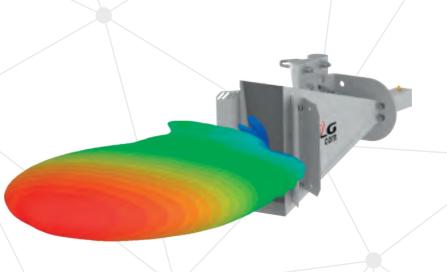
### Wide Band Asymmetrical Horn Antenna

The Wide Band Asymmetrical Horn Antenna offers high gain, high vertical beamwidth and incredible secondary lobes reduction, compatible with the ETSI EN 302 326-3 SS2 performance class. They provide excellent coverage with the best signal-to-noise ratio (SNR), increase the immunity of the network against noise and interference. They also allow the deployment of more equipment in the same site. Antennas have been designed and tested from 4.9 to 6.425 GHz ensuring all diagram, isolation and VSWR properties throughout this band. This allows its use in a very wide range of applications and it's also compliant with standards of international organizations like FCC and ETSI.

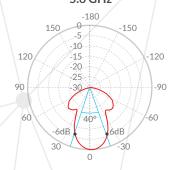




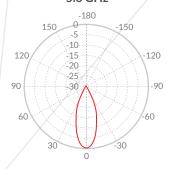
	\
	PD-5800-19-30-DP-UWB
GAIN	19 dBi
FREQUENCY	4.900 GHz to 6.425 GHz
POLARIZATION	Double (V/H)
ANGLE	40°
CONNECTION	SMA Female Reverse



#### HORIZONTAL RADIATION PATTERN 5.6 GHz



#### VERTICAL RADIATION PATTERN 5.6 GHz



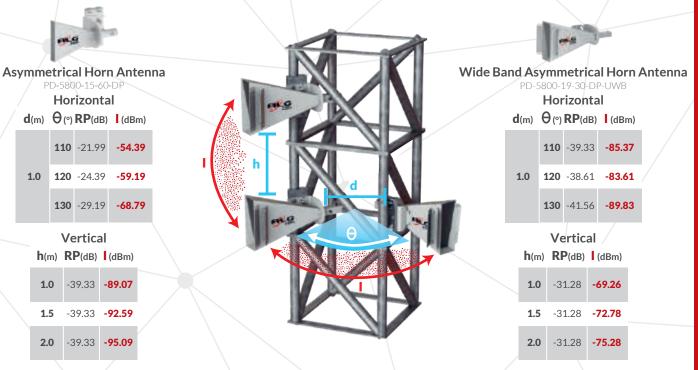




### Great interference rejection

The Asymmetrical Horn Antenna and Wide Band Asymmetrical Horn Antenna have enhanced radiation pattern that mitigates interference emission and reception.

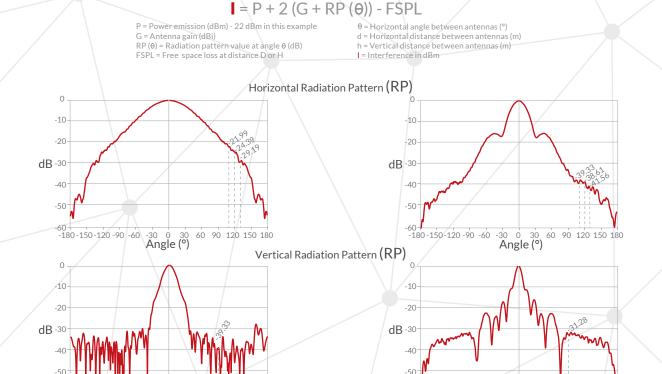
The tables below exemplify the low INTERFERENCE (I) between antennas using the same channel.



The tables above were calculated for 5.6 GHz with the following expression:

60 90 120 150 180

-30 0 30 Angle (°)



-180 -150 -120 -90 -60

60 --180 -150 -120 -90 -60 -30 0 30 60 90 120 150 180 Angle (°)



### LICENSED BAND SOLUTIONS

#### **ANTENNAS**



- Microwave
- · Grid Antenna
- · Directional Broadband Antenna







Customizable flange for various waveguide radio models.



es. 4



### **ANTENNAS**

#### Microwave (Licensed Links)

With a greater radiation efficiency due to its lateral shielding and RF absorber foams aligned with a special lens technology, these antenna models offers a significant reduction of secondary lobes. It was developed to be a high performance antenna with a compact size and a smaller wind area.













										100				1				
	1	PS-4000 PS-4000	-26-06-DI -29-09-DI -31-12-DI -34-18-DI	P P	PS-4	1800-27-0 1800-30-0 1800-32-1	9-DP		PS-6800- PS-6800- PS-6800- PS-6800- PS-6800- PS-6800-	31-06-SP 31-06-DF 34-09-SP 34-09-DF 36-12-SP 36-12-DF 38-18-SP 38-18-DF			PS-7800- PS-7800- PS-7800- PS-7800- PS-7800- PS-7800-	32-06-SP 32-06-DP 35-09-SP 35-09-DP 37-12-SP 37-12-DP 39-18-SP 39-18-DP		PS-10	900-30-1 900-34-1 900-37-1	06-DP
DIAMETER	2 ft	3 ft	4 ft	6 ft	2 ft	3 ft	4 ft	2 ft	3 ft	4 ft	6 ft	2 ft	3 ft	4 ft	6 ft	1 ft	2 ft	3 ft
GAIN	27.5 dBi	30 dBi	32.2 dBi	35.4 dBi	28 dBi	30.6 dBi	33 dBi	29.3 dBi	34.6 dBi	36.6 dBi	39.1 dBi	31.7 dBi	35.6 dBi	36.7 dBi	40.6 dBi	30 dBi	34 dBi	37 dBi
FREQUENCY	3.7	'00 GHz	to 4.300 C	SHz	4.400	GHz to 5.0	000 GHz	6.	425 GHz 1	:o 7.125 G	Hz	7.	125 GHz t	o 8.500 G	Hz	10.000 0	SHz to 1:	1.700 GHz
POLARIZATION		Dua	I (V/H)			Dual (V/H	)			e (V/H) al (V/H)			Single and Du	(V/H) al (V/H)			ingle (V/	

### **Grid Antenna**

It was developed with innovative and patented technology in the construction of the reflection surface and the radiating element, resulting in an unmatched mechanical precision in the market. It has the best radiation efficiency, with perfect symmetry in all co-polar and cross-polar vectors in the reflection over the parabolic surface. Thus, it reaches a value higher than -30 dB cross-polar isolation (+/- 1 dB angle), which is an innovation in the market for low-frequency radios.











	TIE TIE			100		
	PV-1500-23-12-SP PV-1500-23-12-DP	PV-1500-27-20-SP PV-1500-27-20-DP	PV-1500-31-30-SP PV-1500-31-30-DP	PV-1500-33-40-SP PV-1500-33-40-DP		
DIAMETER	4 ft	6.5 ft	9.8 ft	13 ft		
GAIN	23 dBi	27 dBi	31 dBi	33 dBi		
FREQUENCY	1.425 GHz to 1.535 GHz	1.425 GHz to 1.535 GHz	1.425 GHz to 1.535 GHz	1.425 GHz to 1.535 GHz		
POLARIZATION	Single (V/H) and Dual (V/H)	Single (V/H) and Dual (V/H)	Single (V/H) and Dual (V/H)	Single (V/H) and Dual (V/H)		
	PV-2150-25-12-SP PV-2150-25-12-DP	PV-2150-29-20-SP PV-2150-29-20-DP	PV-2150-33-30-SP PV-2150-33-30-DP	PV-2150-35-40-SP PV-2150-35-40-DP		
DIAMETER	4 ft	6.5 ft	9.8 ft	13 ft		
GAIN	GAIN 25.2 dBi 29.3		33.3 dBi	35.2 dBi		
FREQUENCY	2.000 GHz to 2.300 GHz	2.000 GHz to 2.300 GHz	2.000 GHz to 2.300 GHz  2.000 GHz to 2.300 GHz			
DOLARIZATION	Single (V/H)	Single (V/H)	Single (V/H)	Single (V/H)		

POLARIZATION



### CPE 2.5 GHz

Innovative solution with outstanding performance for end customer at 2.5 GHz. Developed exclusively for Cambium ePMP 1000 Radio, it has a smart layout, resulting in a small antenna, lightweight and robust with great cost-benefit. It comes with radio mounting kit and does not require additional jumpers (pigtails) making the installation much easier.





PD-2500-10-40-DP
9.4 dBi
2.570 to 2.620 GHz
Dual (V/H)

#### **DIRECTIONAL BROADBAND ANTENNA**

The Directional Broadband Antennas (Log periodic) was specially developed to provide greater versatility for cellular coverage projects for multiple operators, operating across the entire range of frequencies of cellular telephony.



	PS-880-1900-10-00
GAIN	9 dBi
FREQUENCY	806 MHz to 2200 MHz
POLARIZATION	Single (V)



## **AC/DC UPSs**

WISP's frequently have problems with high interference and noise, not knowing they are the ones creating it for themselves. Compact and easy to install, the AC/DC UPS features an intelligent charger battery with 3 stages. It provides protection against surges, power faults, sags and grid fail. It's also available model with SNMP protocol, for monitoring and management.





Against surges, falls, sags, noises and electrical faults



### AC/DC UPSs













	12V/10A/1A	24V/10A/1A	12V/8A/3A	24V/8A/3A	-48V/10A
OUTPUT VOLTAGE	12V	24V	12V	24V	-48V
OUTPUT POWER	120W/10A	240W/10A	120W/8A	240W/8A	540W/10A
CHARGER CURRENT	1A	1A	3A	ЗА	Configurable 1-5A





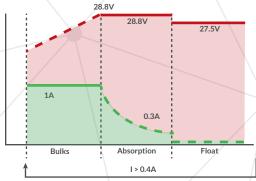






	12V/10A/1A SNMP	24V/10A/1A SNMP	12V/8A/3A SNMP	24V/8A/3A SNMP	-48V/10A SNMP
OUTPUT VOLTAGE	12V	24V	12V	24V	-48V
OUTPUT POWER	120W/10A	240W/10A	120W/8A	240W/8A	540W/10A
CHARGER CURRENT	1A	1A	3A	3A	Configurable 1-5A

### BATTERIES CHARGER STAGES 28.8V





#### **PROTECTION AGAINST**

Outbreaks Falls Overvoltages Noise Power failures Sags



### **ACCESSORIES SOLUTIONS**

#### **ACCESSORIES**



- · OMT's
- Waveguide Flanges
- High Performance Jumpers
- Fixing Kits
- Armored Boxes









**DURABILITY**High durability and very low maintenance requirements



FLEXIBILITY

Compatible with various models to meet all your needs



HIGH PERFORMANCE

High Performance Links





### **OMT** for dual polarization

It is the accessory for upgrading a single polarization to dual polarization link. It has a fastening system with fine adjustment of cross-polar discrimination (XPD) and direct coupling for several radio models or flexible waveguide connection.



### Waveguide Flange

Complete and customizable adapters licensed band radios for single and dual polarization links.





### High Performance Jumper

Product 100% manufactured and tested by ALGcom with strict quality control. Our cable is semi-rigid with tin finish, providing excellent shielding properties. It has the lowest VSWR in the market and less than 0.8 dB of attenuation. They are sold in pairs with measurement test report.





















	PT-5800-N-N-05	PT-5800-S-N-05	PT-5800-S-S-05	PT-5800-S-M-05	PT-5800-S-N-10	PT-5800-N-N-15	PT-5800-S-S-XX	PT-5800-S-M-05	PT-5800-S-M-XX
LENGHT	0.5 m	0.5 m	0.5 m	0.5 m	1.0 m	1.5 m	Special for radios MikroTik (with box) and Ubiquiti Rocket		Special for Intelbras radio
CABLE	SM141	SM141	SM141	SM141	SM141	SM141	SM141	SM141	SM141
CONNECTOR 1	N male	SMA reverse male	SMA reverse male	SMA reverse male	SMA reverse male	N male	SMA reverse male	SMA reverse male	SMA reverse male
CONNECTOR 2	N male	N male	SMA reverse male	ммсх	N male	N male	SMA reverse male	ммсх	N male



### Fixing Kit

Lightweight and corrosion resistant, radio Fixing Kits are 100% aluminum and are compatible with different radio models. They allow direct mounting to the antenna, making installation and equipment maintenance easy.

#### **COMPATIBLE RADIOS**

MikroTik Routerboards
Netbox 5
NetMetal 5
Intelbras APC-5M
Ubiquiti Rocket

#### **COMPATIBLE ANTENNAS**

Dish Antenna
Parabolic Shielded Antenna
UHP Antenna
Asymmetrical Horn Antenna
Wide Band Asymmetrical Horn Antenna



Fixing Kit PA-5800-29-06-ST

#### **Armored Box**

They provide RF protection against external noise and extend the equipment life span.





	FIT CB-31-20-14-AP	MASTER CB-44-24-14-AP-A
MATERIAL	Aluminum	Aluminum
COMPATIBLE RADIOS	MikroTik RouterBoards (RB411,RB911,RB912,RB922) and Intelbras	MikroTik RouterBoards, Netbox and Netmetal 5, Intelbras APC5m and Ubiquiti Rocket





- Dish Antenna (page 6)
- Parabolic Shielded Antenna (page 7)
- Ultra High Performance Antenna (page 8)
- Asymmetrical Horn Antenna (page 10)
- Wide Band Asymmetrical Horn Antenna (page 11)









MASTER Armored Box CB-44-24-14-AP-A



## **OUTDOOR ENCLOSURES**

- Galvanized steel
- Aluminum





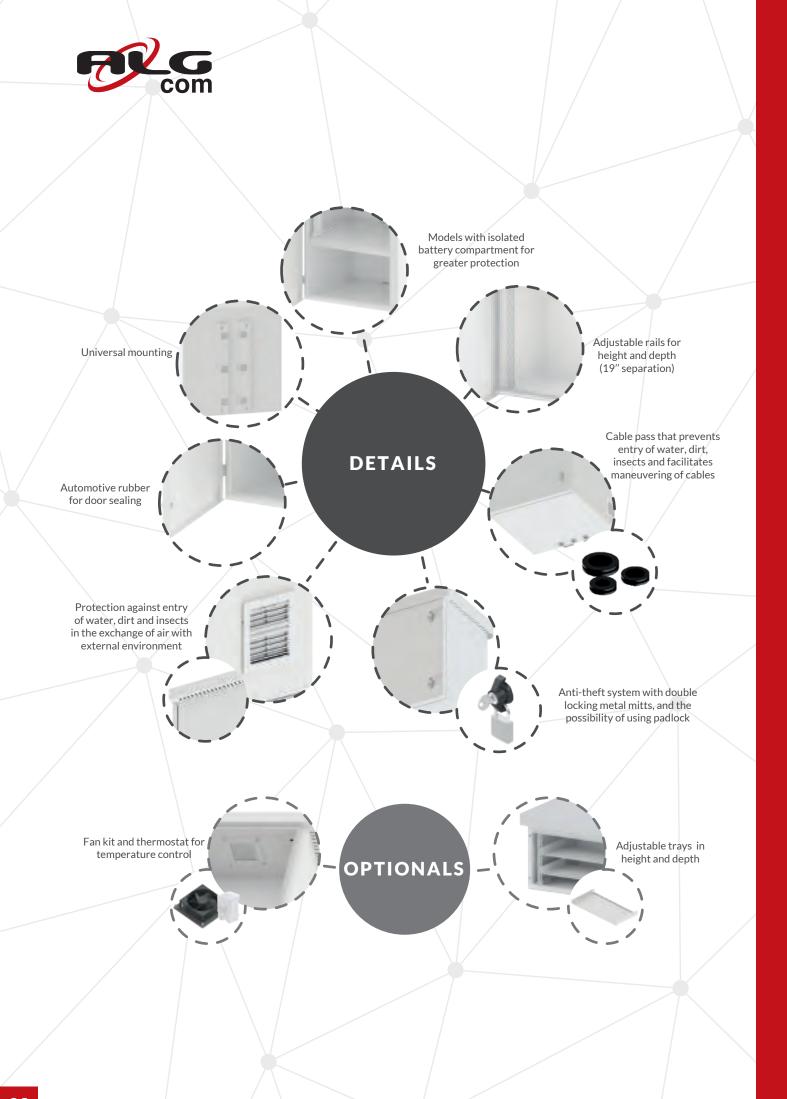


**ARTICULATION**Easy cable installation and maneuvering

Various steel and aluminum models, adjustments and options to meet all your needs

SAFETY
Anti-vandalism protection with metal locking hinges and locks







#### **GALVANIZED STEEL**



#### **STANDARD**

- Universal Pole/Wall/Mast Holder included

GO-05-19-40-AC-ST
5U x 19" x 315 mm
100 Liters
20.5 kg

GO-10-19-40-AC-ST 10U x 19" x 315 mm 100 Liters 21 kg





#### STANDARD WITH BATTERY COMPARTMENT

- Isolated space for batteries

- Pole/Wall/Mast mounting hardware (6U) or floor mounting hardware (12U) included



6U x 19" x 500 mm 58 Liters

GO-12-19-50-AC-STB 12U x 19" x 500 mm 155 Liters

Battery Compartment 600 x 610 x 540 mm 53 Liters





#### **STANDARD**

- Universal Pole/Wall/Mast Holder included

27.00	14
GO-06-19-50-AL-ST	GO-08-19-50-AL-ST
6U x 19" x 500 mm 82 Liters	8U x 19" x 500 mm 105 Liters

x 19" x 500 mm 105 Liters 11.5 kg

GO-10-19-58-AL-ST 10U x 19" x 500 mm 127 Liters



#### **FOR POLE**

- Shorter depth to install on poles, facilitates access to equipment
- Universal Pole/Wall/Mast Holder included





#### STANDARD WITH BATTERY COMPARTMENT

- Isolated space for batteries
- Floor mounting hardware included





GO-12-19-50-AL-STB	Battery Compartment
12U x 19" x 500 mm	600 x 610 x 540 mm
155 Liters	53 Liters
27 kg	21 kg



### **CONTROL PANEL**

- It allows total customization for equipment fixing and cable pass



#### GQ-50-44-20-AL-ST

495 x 395 x 170 mm 33 Liters 5.5 kg



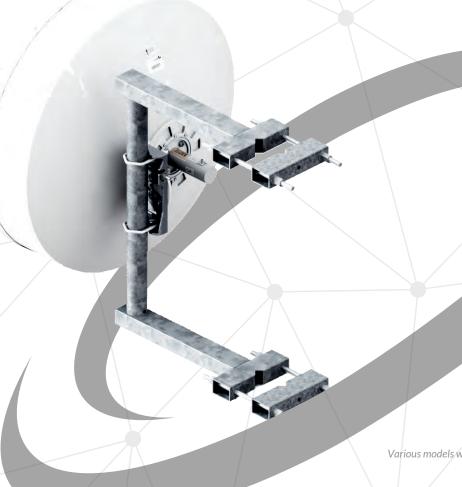
## **MOUNTING HARDWARE**

- Galvanized Steel
- Aluminum



Customizable and easily adjustable, they were designed to suit all types of tower. They combine lightness, robustness and a modern and innovative design.

Universal Clip



#### VERSATILITY

Various models with universal fittings for different profiles No additional cutting or drilling required



#### **RESISTANCE**

100% structural aluminum: stronger and lighter than steel Protected against corrosion



### **ECONOMY**

Compact packaging that facilitates logistics and reduces the cost of transportation





Reduced number of components make installation quick and easy





#### **GALVANIZED STEEL**

Designed with high strength materials and hot dip galvanization, they guarantee stability and protection against corrosion even in tough environments.



















	SCS-04-06-2	SCA-03-10-2	SCA-03-10-4	SFE-XX-06-2	SFA-XX-15-4	SFA-XX-15-4-PP	SPA-04-06-2	SCI-04-15-4-PP
MATERIAL	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized	Hot dipped galvanized
POLE DIAMETER	2"   50.8 mm	2"   50.8 mm	4"   101.6 mm	2"   50.8 mm	4"   101.6 mm	4"   101.6 mm	2"   50.8 mm	4"   101.6 mm
WEIGHT	9.5 kg	17 kg	19 kg	10 kg   11 kg	67 kg   75 kg   82 kg 96 kg   140 kg	85 kg   92 kg   99 kg 114 kg   157 kg	6.2 kg	57 kg

### **ALUMINUM**

Designed in marine aluminum alloy, they are more resistant and light than steel. They offer more protection against corrosion with compact packaging that reduces logistics costs.















	SCA-03-03-2	SCA-05-10-3	SFA-04-10-3	SPA-04-10-2	SPA-05-15-3	SRT-00-2000-2	SRT-00-3000-4
MATERIAL	Marine Aluminum Alloy						
POLE DIAMETER	1.3/4"   44.45 mm	3"   76.2 mm	3"   76.2 mm	2"   50.8 mm	3"   76.2 mm	2"   50.8 mm	4"   101.6 mm
WEIGHT	3 kg	4.5 kg	9 kg	2.2 kg	4.2 kg	15 kg	28 kg



## COMPLETE LINE IN TELECOMMUNICATIONS SOLUTIONS



## **FOR MORE INFORMATION**Contact us

+55 54 3201.1903 | sales@algcom.com.br

www.**ALGcom**.com.br









