# THE LEADING OUTDOOR NETWORK APPLIANCE COMPANY

Total Turnkey Solutions for Outdoor PoE, Wired/Wireless, and IP Video Applications









# **Key Features**

#### **Compact and Durable**

Antenna materials are carefully chosen to minimize electrolytic corrision and maximize rugged mechanical aspects to provide users with maintenance free operation

#### **High Performance Radiation Pattern**

Superior RF and Ground Plane Design to Ensure Maximum Directivity and Minimizes Leakages

#### **Low Loss High Efficiency Radiation System**

Exceptional VSWR ranging from 1.3 to 1.5 to maximize electrical to wireless power transfer

### Low Side and Back Lobe Radiation

Easier Frequency Coordination and Interference Mitigation

#### Low Visibility

Neutral Color and Sleek Design Minimizes Visual Impact to Deployment Area

#### **Work Well in Highly Congested Area**

Antenna Directivity Optimizes License Free Radio Spectrum to Provide More Aggregated Bandwidth Per Deployment Area

#### **Center Pin Grounded**

Minimize Transient Voltage Protection for Connected Radio System

# General Technical Specifications Electrical

Polarization Linear
Impedenace 50 ± 5 Ohms

#### Mechanical

Connector Type N Female

Temperature Range -20°C to +60°C

Max Pole Size 2 inches

Reflector Material Aluminum Alloy

# AirEther™ PA Series

# 2.4GHz and 5GHz Directional Panel Antennas

Inscape Data Corporation, the leading outdoor network appliance company, offers a broad range of high gain antennas, 9dBi to 29dBi, for every major license free air interface technology with broad deployments in all regions. The portfolio of Inscape Data directional panel antenna system includes all-weather antennas for outdoor long range license free radios and WiFi systems in bands ranging from 2.4GHz up to 6 GHz. The high performance and low loss directional panel antennas are built ground up with reliability and durability. Inscape Data directional panel antenna offers the best return on investment for value-priced license free long range wireless industry.

# **Applications**



#### WIRELESS NETWORK SOLUTIONS

Building to building wireless connectivity or point to multipoint wireless bridges, Inscape Data outdoor antenna system provides high reliability and performance for the most demanding wireless networking applications



#### WIRELESS INFRASTRUCTURE

Complete outdoor wireless infrastructure antenna solutions from Inscape Data catering to wireless internet service providers, municipalities, SCADA, wireless machine to machine, telemetry, institutions, campuses, and more. Inscape Data is your one-stop source for high performance economical antenna solutions



#### CARRIER SOLUTIONS

Inscape Data antenna solutions provide the best in class transmission electrical characteristics between 2.4 GHz and 5.8 GHz. The high performance characteristics keep the carrier wide-band high capacity backhaul and wireless transmission networks moving in the most extreme weather conditions



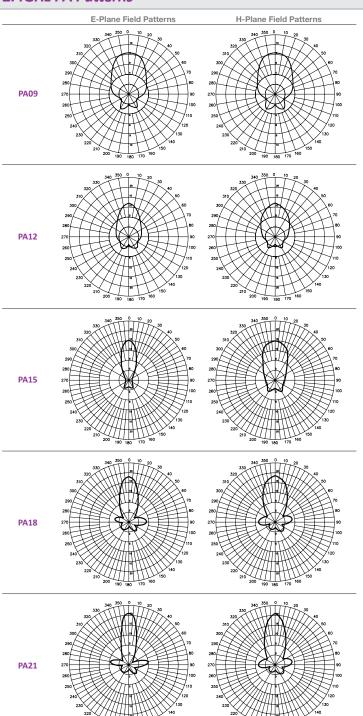
#### WIRELESS VIDEO SECURITY

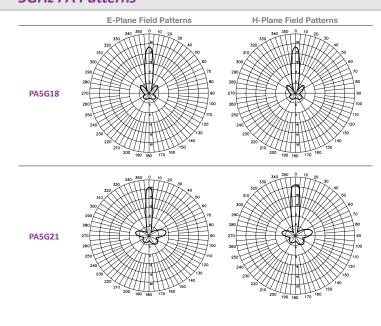
For hard to wire video applications, Inscape Data outdoor antenna system economically transmit and receive sensitive security images to secure parking lots, property perimeter, and even the most remote places

# **System Configurations**

Band		2.4GHz					5GHz	
Model Name	PA09	PA12	PA15	PA18	PA21	PA5G18	PA5G21	
Electrical								
Frequency Range	2400~2500MHz	2400~2500MHz	2400~2500MHz	2400~2500MHz	2400~2500MHz	5100~5900MHz	5100~5900MHz	
Gain (dBi)	9 dBi	12 dBi	15 dBi	18 dBi	21 dBi	18 dBi	21 dBi	
3 dB Horizontal Beamwidth	75	50	45	30	20	10	10	
3 dB Vertical Beamwidth	75	30	25	20	15	10	8	
Front-to-Back Ratio	15dB	20dB	25dB	30dB	35dB	30dB	35dB	
Maximum Power Input	10W	10W	10W	20W	20W	10W	20W	
VSWR	1:1.5 Max	1:1.5 Max	1:1.5 Max	1:1.5 Max	1:1.3 Max	1:1.5 Max	1:1.3 Max	
Mechanical								
Dimensions	107x90x30mm	215x90x30mm	454x134x30mm	463x263x30mm	370x370x35mm	263x263x48mm	370x370x35mm	
Weight	280g	560g	800g	900g	2.1kg	1.68kg	2.1kg	
Randome Color	White	White	White	White	White	Gray & White	White	
Randome Material	PVC	PVC	PVC	PVC	PVC	PC & ABS	PVC	
Mounting Method	Vertical	Vertical	Vertical	Vertical	Horizontal	Vertical	Vertical	

# **5GHz PA Patterns**





#### **Accessories**

#### AC100

1M Low Loss Antenna Cable, N-Male to N-Male



#### LSS0001

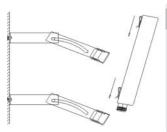
0~6GHz High Performance RF Lighting Arrestor



# **Package Contents**

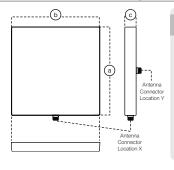
- Panel Antenna Wall Mount Kit
- SB100 Wall and Mast Mount Swivel Bracket Kit with U-Bolts
- Antenna Literature

# **Bracket Information**



Bracket Type	Swivel Wall & Pole Mount		
Part No.	SB100		
Max Length	19cm		
Min Length	12cm		
Weight	470g		
Swivel Angel	+/- 90° (H)		
	+/- 40° (V)		
Material	Stainless Steel		

# **Dimensions & Interfaces**



Frequency & Part No.	Dimension axbxc	Connector Location
2.4GHz - PA09	107x90x30mm	х
2.4GHz - PA12	215x90x30mm	х
2.4GHz - PA15	454x134x30mm	х
2.4GHz - PA18	263x263x30mm	х
2.4GHz - PA21	370x370x35mm	Υ
4.9GHz - PA18	270x205x15mm	х
4.9GHz - PA21	370x370x35mm	Υ
5GHz - PA18	263x263x48mm	х
5GHz - PA21	370x370x35mm	Υ



Product Information Online: www.inscapedata.com/antenna-pa.htm

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