



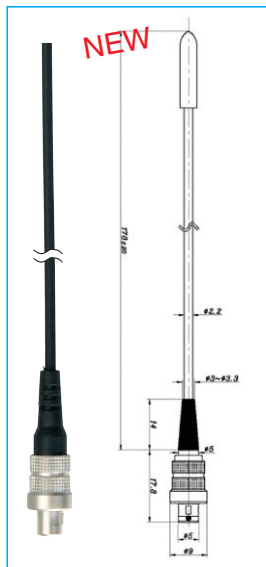
Antenna

Antenna

Custom Band	SPB-450	SP	400~900MHz	134
	SMAP-450	SMA	400~900MHz	134
	SMALP-450	SMA	400~900MHz	134
	SSMAP-450.....	SSMA	400~900MHz	134
	SPU-450	SP	400~900MHz	134
SMA/SMC	SMAP-434	SMA	135~900MHz	135
	SMALP-434	SMA	200~900MHz	135
	SMAP-447	SMA	450MHz	135
	SMAP-ANT-925S.....	SMA	900MHz	135
	SMAP-900-1	SMA	900MHz	135
	SMAP-1800-1	SMA	1800MHz	135
	SMAP-2400-1	SMA	2400MHz	136
	SMAP-1800	SMA	1800MHz	136
	SMAP-2400	SMA	2400MHz	136
	SMALP-1800	SMA	1800MHz	136
	SMALP-2400	SMA	2400MHz	136
SMAP-2400T	SMA	2400MHz	136	
TNC Antenna	TNCP-800.....	TNC	800MHz	137
BNC Antenna	BNCP-1800	BNC	1800MHz	137

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Antenna – Customizable Band Antenna



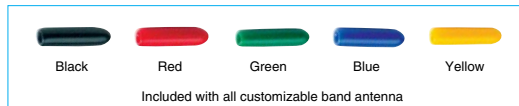
SPB-450-Super miniature antenna

The SPB-450 is one of the versatile antenna series customizable from a bandwidth of 400MHz to 900MHz. This new 1/4 wavelength whip antenna brings wireless applications to a new paradigm.

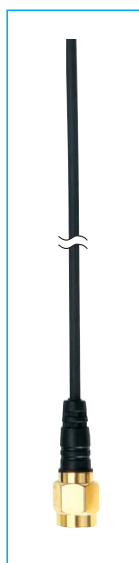
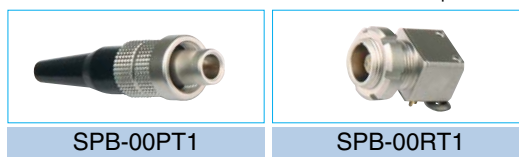
- 1/4 Wavelength Whip antenna
- Customizable band using cutting chart
- 400MHz ~ 900MHz
- Sam Woo's High-quality SPB connector

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ + 70°C



Bare SPB plug and receptacle also available.
For more information on Circular Connectors refer to p. 39.

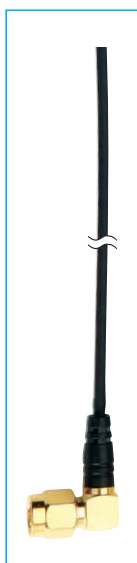


SMAP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SMA connector
- Cap(s) included

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ + 70°C

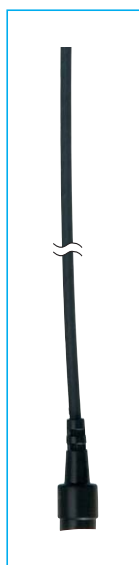


SMALP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- Right-angle SMA connector
- Cap(s) included

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ + 70°C



SSMAP-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SSMA connector
- Cap(s) included

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ + 70°C



SPU-450

- 1/4 Wavelength Whip Antenna
- Customizable band using cutting chart
- 400MHz~900MHz
- SPU connector(also available with SPU receptacle)
- Cap(s) included

Electrical Performance	Specifications
Frequency Range	400MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	PVC
Sleeve Material	Urethan
Cap Material	PVC
Antenna Length	~1780mm
Operating Temperature	-30°C ~ + 70°C

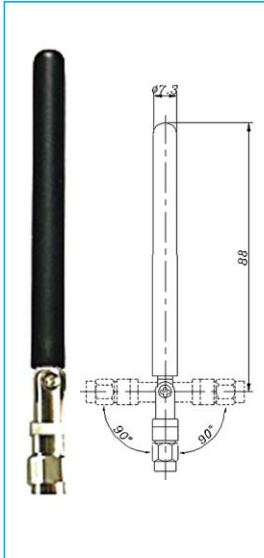
Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

SMAP-434

- 1/4 Wavelength Monopole Antenna
- 180° Tilting Helical or Whip Type
- Available with other connectors

Electrical Performance	Specifications
Frequency Range	200MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	Urethane
Connector	SMA (Male)
Antenna Length	~88mm
Operating Temperature	-30°C ~ +70°C
Others	

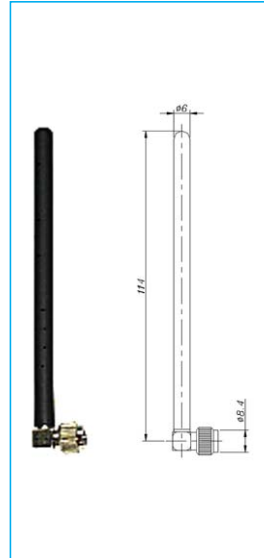


SMALP-434

- 1/4 Wavelength Monopole Antenna
- 90° Fixed Helical or Whip Type
- Available with other connectors

Electrical Performance	Specifications
Frequency Range	135MHz~900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	SWC
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~114mm
Operating Temperature	-30°C ~ +70°C
Others	

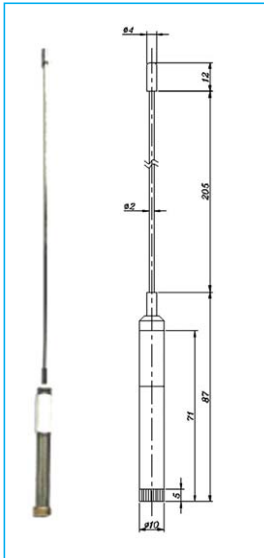


SMAP-447

- 1/2 Wavelength Spike Antenna
- Designed for Outdoor Use

Electrical Performance	Specifications
Frequency Range	400MHz~500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	SuS
Base Material	BS / Acetal
Connector	SMA (Male)
Antenna Length	~330mm
Operating Temperature	-30°C ~ +70°C
Others	

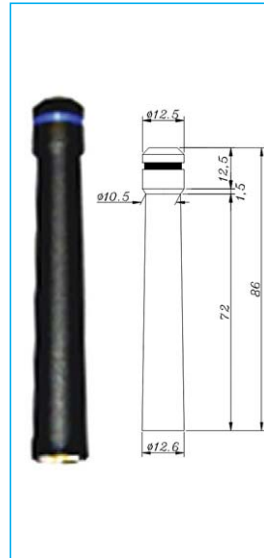


SMAP-ANT-925S

- 1/2 Wavelength Helical Antenna
- High Gain
- 900MHz Band

Electrical Performance	Specifications
Frequency Range	900MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~86mm
Operating Temperature	-30°C ~ +70°C
Others	

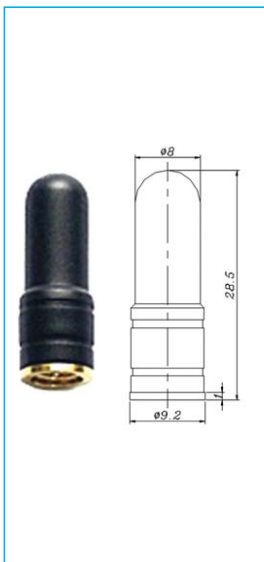


SMAP-900-1

- 1/4 Wavelength Helical Antenna
- 900MHz Band

Electrical Performance	Specifications
Frequency Range	824~960MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	

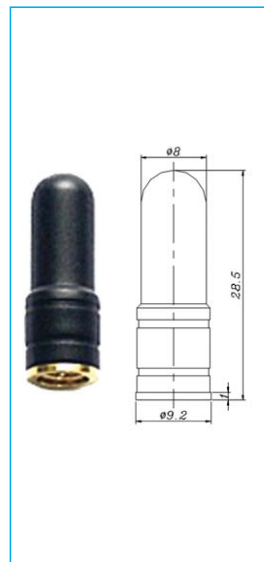


SMAP-1800-1

- 1/4 Wavelength Helical Antenna
- 1800MHz Band

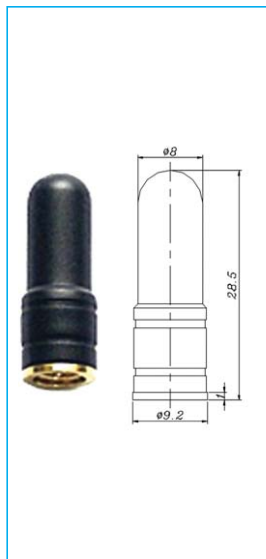
Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	



Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

Antenna

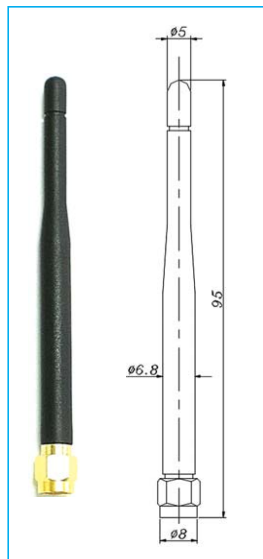


SMAP-2400-1

- 1/4 Wavelength Helical Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	0dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PVC
Connector	SMA (Male)
Antenna Length	~28.5mm
Operating Temperature	-30°C ~ +70°C
Others	

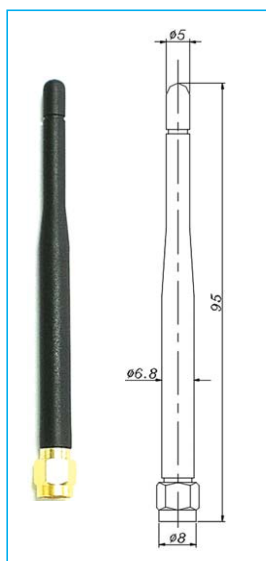


SMAP-1800

- 1/2 Wavelength Dipole Antenna
- 1800 MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~95mm
Operating Temperature	-30°C ~ +70°C
Others	

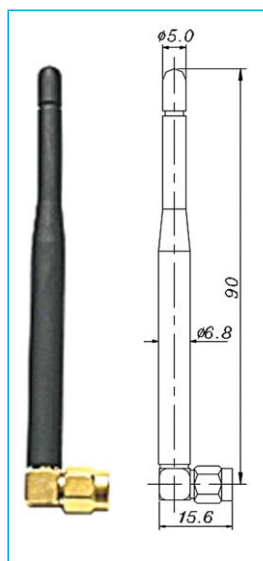


SMAP-2400

- 1/2 Wavelength Dipole Antenna
- 2400 MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~95mm
Operating Temperature	-30°C ~ +70°C
Others	

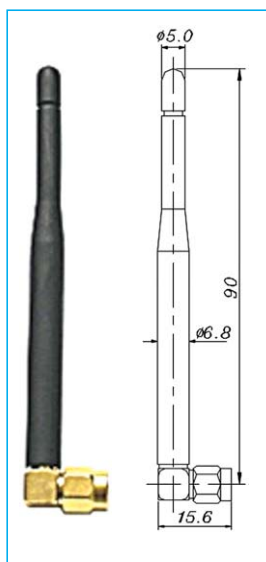


SMALP-1800

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 1800 MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~90mm
Operating Temperature	-30°C ~ +70°C
Others	

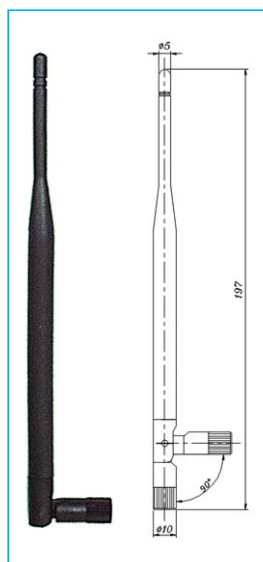


SMALP-2400

- 1/2 Wavelength Dipole Antenna
- 90° Fixed 2400 MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	TPE
Connector	SMA (Male)
Antenna Length	~90mm
Operating Temperature	-30°C ~ +70°C
Others	



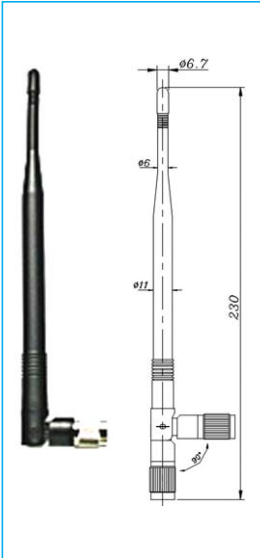
SMAP-2400T

- 90° Tilting 2400MHz Band
- High Gain

Electrical Performance	Specifications
Frequency Range	2350~2480MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:1.5
Gain	4dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PA
Connector	SMA (Male)
Antenna Length	~197mm
Operating Temperature	-30°C ~ +70°C
Others	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

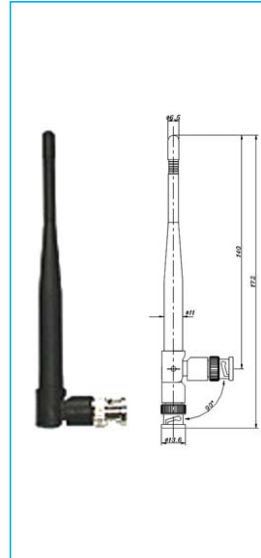


TNCP-800

- 1/2 Wavelength Dipole Antenna
- 90° Tilting 800MHz Band

Electrical Performance	Specifications
Frequency Range	800MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	StCu
Base Material	PA
Connector	TNC (Male)
Antenna Length	~230mm
Operating Temperature	-30°C ~ +70°C
Others	



BNCP-1800

- 1/2 Wavelength Dipole Antenna
- 90° Tilting 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 1:2.0
Gain	2dB

Mechanical Performance	Specifications
Radiator	Cu
Base Material	PA
Connector	BNC (Male)
Antenna Length	~172mm
Operating Temperature	-30°C ~ +70°C
Others	

Specifications subject to change without notice. Consult Sam Woo Electronics for the latest specifications.

