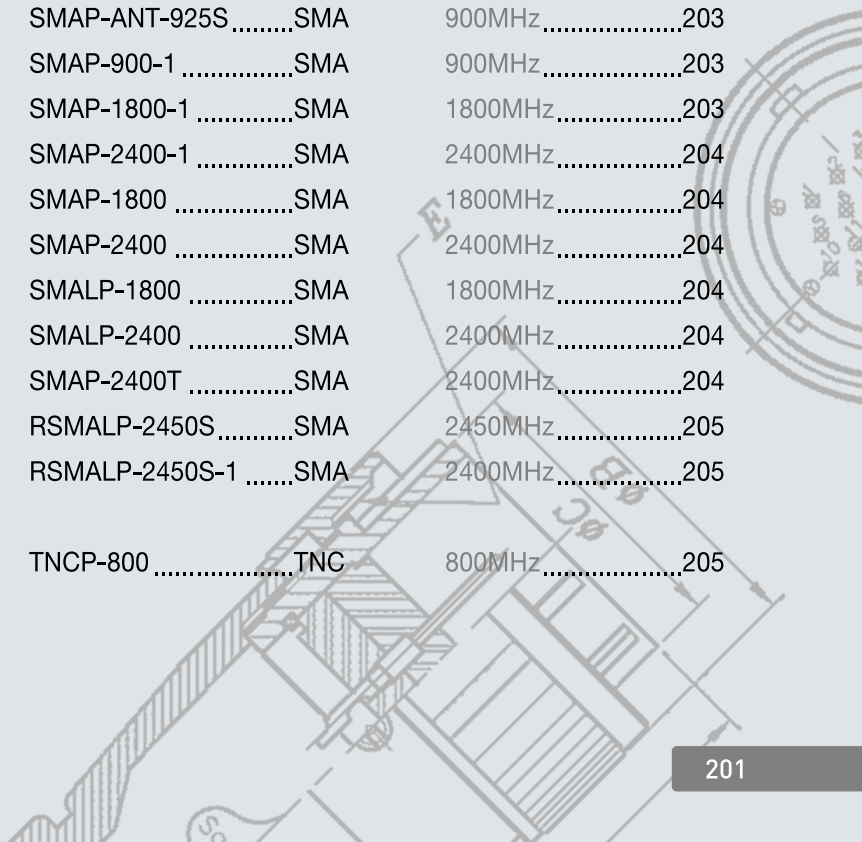


Antenna

Antenna

Custom Band	SPB-450	SP	400~900MHz	202
	SMAP-450	SMA	400~900MHz	202
	SMALP-450	SMA	400~900MHz	202
	SSMAP-450	SSMA	400~900MHz	202
	SPU-450	SP	400~900MHz	202
SMA	SMAP-434	SMA	200~900MHz	203
	SMALP-434	SMA	135~900MHz	203
	SMAP-447	SMA	450MHz	203
	SMAP-ANT-925S	SMA	900MHz	203
	SMAP-900-1	SMA	900MHz	203
	SMAP-1800-1	SMA	1800MHz	203
	SMAP-2400-1	SMA	2400MHz	204
	SMAP-1800	SMA	1800MHz	204
	SMAP-2400	SMA	2400MHz	204
	SMALP-1800	SMA	1800MHz	204
	SMALP-2400	SMA	2400MHz	204
	SMAP-2400T	SMA	2400MHz	204
	RSMALP-2450S	SMA	2450MHz	205
	RSMALP-2450S-1	SMA	2400MHz	205
	TNC Antenna	TNCP-800	TNC	800MHz

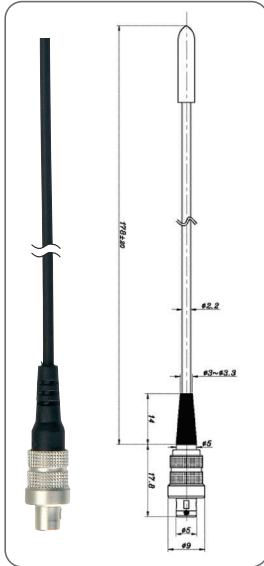


Antenna Customizable Band Antenna

■ 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	50 Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 2.0:1
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.



SPB-00PT1



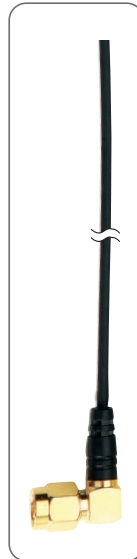
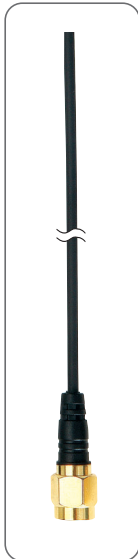
SPB-00RT1

■ 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	50 Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 2.0:1
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

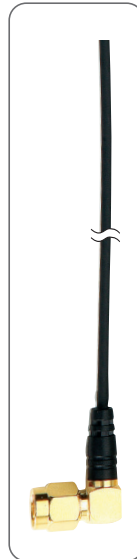


■ SMALP-450

- 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	50 Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 2.0:1
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

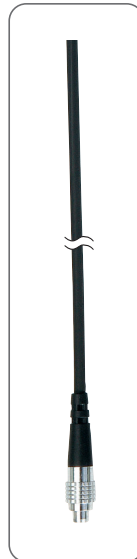
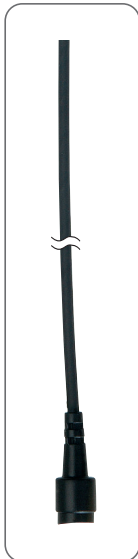


■ SSMAP-450

- 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	50 Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 2.0:1
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

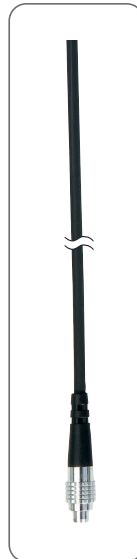


■ SPU-450

- 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	50 Ω
Radiation Pattern	Omni directional
Polarization	Vertical
V.S.W.R	Less than 2.0:1
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	420~440MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	0dBi

Mechanical Performance	Specifications
Radiator	SWC / Cu
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~108mm
Operating Temperature	-30℃ ~ +70℃

SMALP-434

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

Electrical Performance	Specifications
Frequency Range	420~440MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	0dBi

Mechanical Performance	Specifications
Radiator	SWC / Cu
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~108mm
Operating Temperature	-30℃ ~ +70℃

SMAP-447

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

Electrical Performance	Specifications
Frequency Range	400~500MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 1.5:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	BRASS / ACETAL
Connector	SMA MALE
Antenna Length	~330mm
Operating Temperature	-30℃ ~ +70℃

SMAP-ANT-925S

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

Electrical Performance	Specifications
Frequency Range	900MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Cu
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~86mm
Operating Temperature	-30℃ ~ +70℃

SMAP-900-1

- 1/4 Wavelength Helical Antenna
- 900Mhz Band

Electrical Performance	Specifications
Frequency Range	824~960MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	0dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~34.5mm
Operating Temperature	-30℃ ~ +70℃

SMAP-1800-1

- 1/4 Wavelength Helical Antenna
- 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1710~1990MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	0dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~134.5mm
Operating Temperature	-30℃ ~ +70℃

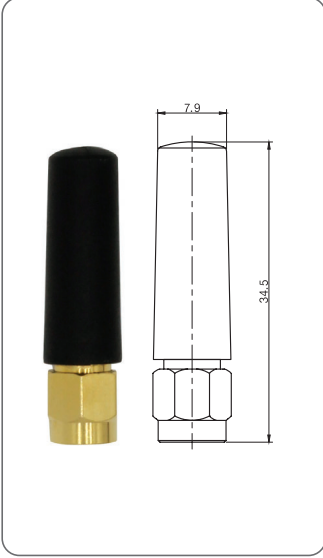
Antenna

■ SMAP-2400-1

- 1/4 Wavelength Helical Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	0dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~34.5mm
Operating Temperature	-30℃ ~ + 70℃

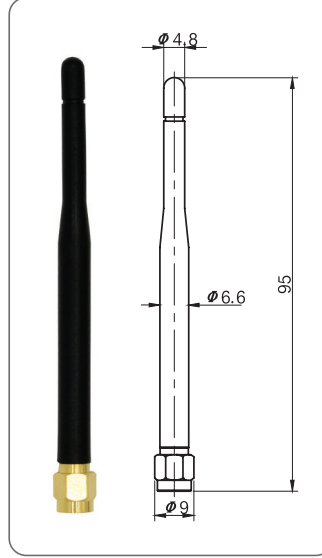


■ SMAP-1800

- 1/2 Wavelength Dipole Antenna
- 1800MHz Band

Electrical Performance	Specifications
Frequency Range	1170~1990MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~95.0mm
Operating Temperature	-30℃ ~ + 70℃

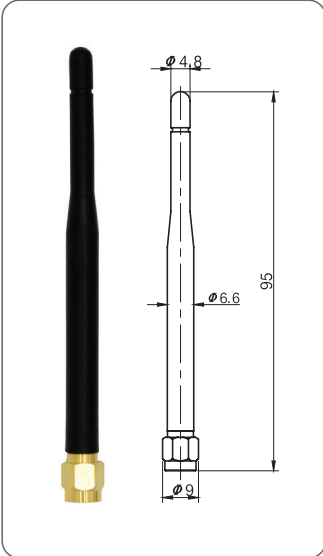


■ SMAP-2400

- 1/2 Wavelength Dipole Antenna
- 2400MHz Band

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~95.0mm
Operating Temperature	-30℃ ~ + 70℃

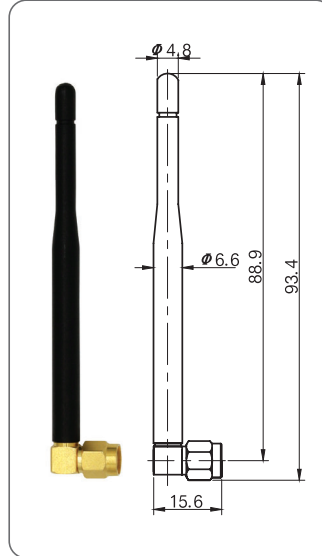


■ SMALP-1800

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

Electrical Performance	Specifications
Frequency Range	1170~1990MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~93.4mm
Operating Temperature	-30℃ ~ + 70℃

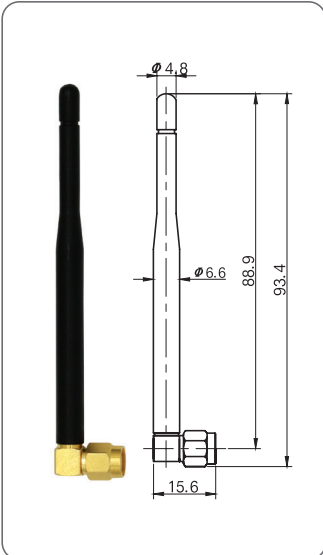


■ SMALP-2400

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

Electrical Performance	Specifications
Frequency Range	2400~2500MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	SMA MALE
Antenna Length	~93.4mm
Operating Temperature	-30℃ ~ + 70℃

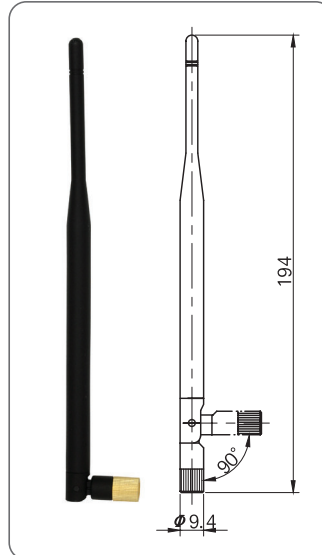


■ SMAP-2400T

- 90° Tilting 2400MHz Bank
- High Gain

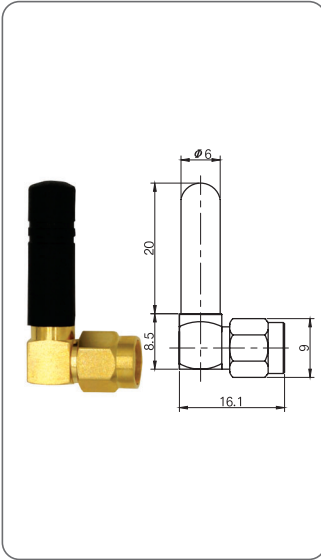
Electrical Performance	Specifications
Frequency Range	2350~2480MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	4dBi

Mechanical Performance	Specifications
Radiator	Phosphor Bronze
Base Material	KEYFLEX / LUMIDE
Connector	SMA MALE
Antenna Length	~194mm
Operating Temperature	-30℃ ~ + 70℃



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

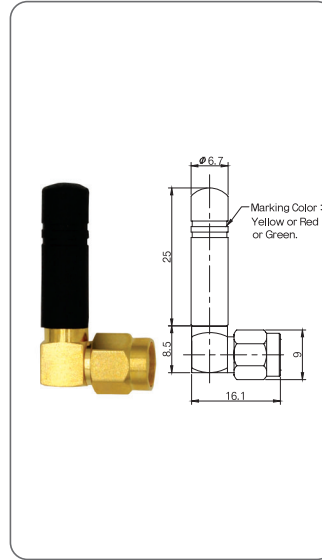
■ RSMALP-2450S



Electrical Performance	Specifications
Frequency Range	2350~2600MHz
Center Frequency	2.45GHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	1.6dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	RP-SMA
Antenna Length	~93.4mm
Operating Temperature	-30℃ ~ + 70℃

■ RSMALP-2450S-1

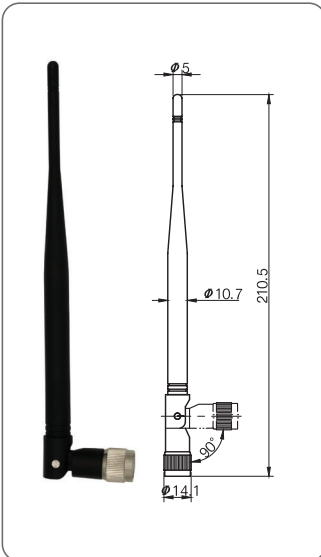


Electrical Performance	Specifications
Frequency Range	2350~2600MHz
Center Frequency	2.45GHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	1.6dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX
Connector	RP-SMA
Antenna Length	~33.5mm
Operating Temperature	-30℃ ~ + 70℃

■ TNCP-800

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



Electrical Performance	Specifications
Frequency Range	824~894MHz
Nominal Impedance	50 Ω Normal ± 10
Radiation Pattern	Omni-directional
Polarization	Linear Vertical
V.S.W.R	Less Than 2.0:1
Gain(dBi)	2dBi

Mechanical Performance	Specifications
Radiator	SWC / Ni
Base Material	KEYFLEX / LUMIDE
Connector	TNC MALE
Antenna Length	~210.5mm
Operating Temperature	-30℃ ~ + 70℃