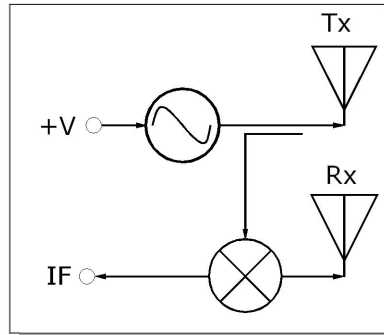
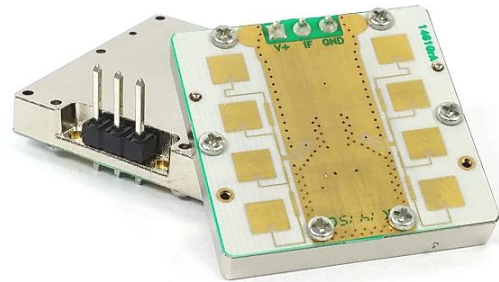


K-Band Miniature Microwave Doppler Transceiver Module



Block diagram



Description

AP96 series K-Band miniature microwave module is a Doppler transceiver with a low current HEMT oscillator, a single balance mixer and bi-static microstrip patch antenna arrays. It is ideal for applications in automatic access, security, lighting control and speed measurement.

Its lightweight, miniature size and slim profile offer the flexibility to OEM manufacturers in making trendy and slim products.

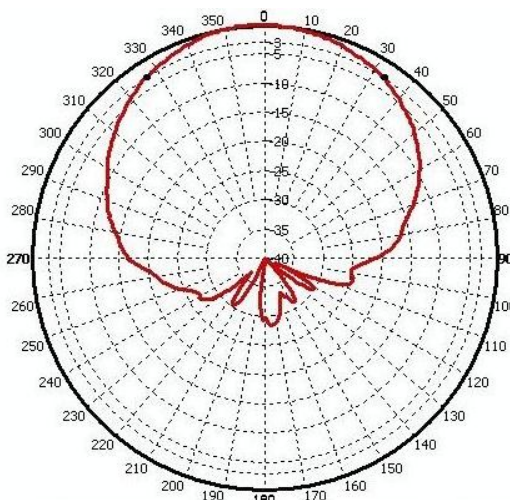
Features

- Small size
- Light weight

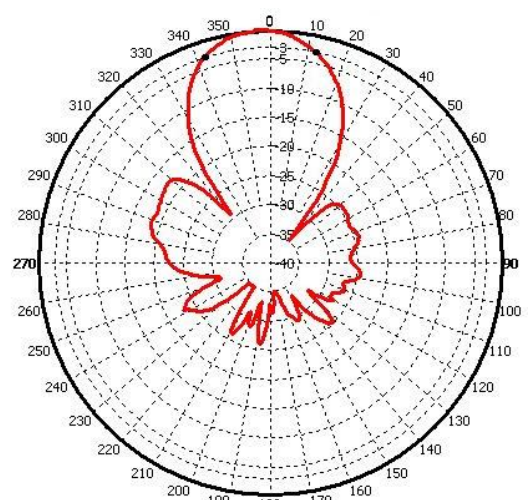
Applications

- Door opener
- Speed measurement
- Lighting control

Antenna Beam Pattern



Elevation

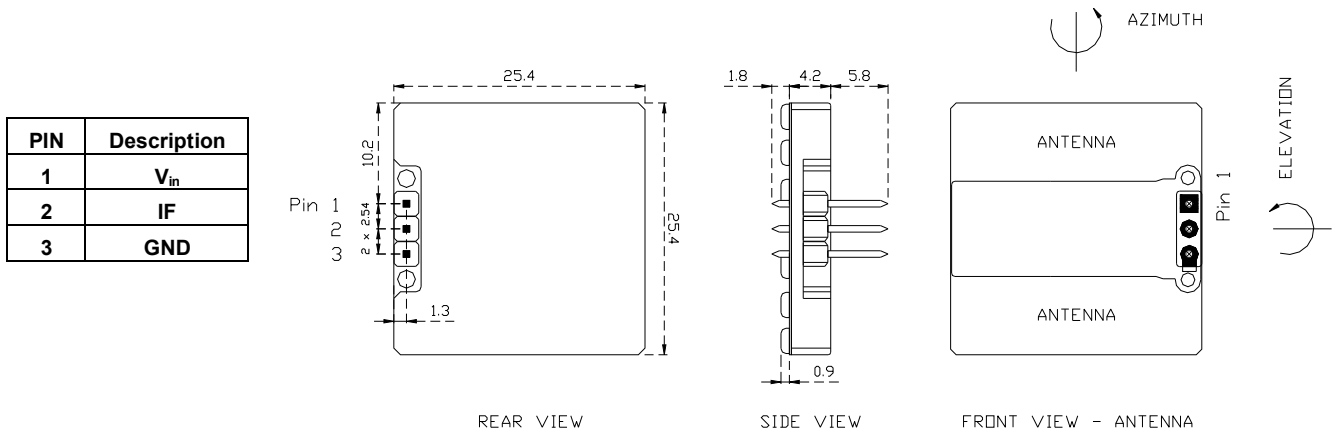


Azimuth



Technical Specifications

Outline diagram (All dimensions in mm)



Unless noted otherwise, the specifications are measured in CW operation at +25°C.

Parameter		Notes	Min	Typ	Max	Units
Transmit frequency	AP96	1, 3	24.000	24.125	24.250	GHz
	AP96-1	2, 3	24.075	24.125	24.175	GHz
	AP96-2	1, 3	24.150	24.200	24.250	GHz
	AP96-3	1, 3	24.000	24.125	24.250	GHz
Frequency drift vs temperature				-1		MHz/°C
Radiated Power (EIRP)		1, 2		15		dBm
Spurious emission		1, 2			-30	dBm
Antenna beam-width (3 dB) – azimuth				32		°
Antenna beam-width (3 dB) – elevation				80		°
Antenna sidelobes				-15		dB
Pulse Repetition Frequency (PRF)		4		2		KHz
Pulse width			10			µSec
Supply voltage, V_{in}	AP96, AP96-1, AP96-2		4.75	5.00	5.25	V_{DC}
	AP96-3		2.85	3.00	3.15	V_{DC}
Current consumption				30	40	mA
Operating temperature			-20		60	°C
Outline dimension			25.4×25.4×11.8			mm
Weight				2		g

Note 1: Complies with EN 300 440.

Note 2: Complies with FCC Part 15.245.

Note 3: The transmit frequency stays within the minimum and maximum range over the specified operating temperature range.

Note 4: Applicable to V_{in} .

Note 5: The design, manufacturing process and specifications of this device are subject to change without prior notice.



Attention:
Observe precautions for handling electrostatic sensitive devices.

