## Antenna Details:

Туре	Manufacturer	Part Number	Gain
Patch	Centurion	CAF94131	1.5 dBi
Dipole	Radiall	R380.500.117	2 dBi
Dipole	Radiall/Larsen	R380.500.116	2 dBi

All the antennas meet the requirements of 15.203. The dipoles use a reverse polarity SMA. The patch is installed at the factory, integral to the host device, and is not user accessible.



# Specifications

#### MicroBlue

#### **Internal Wireless Antenna**

Part Number (P/N): CAF94131

#### Features:

- Versatile and easy to use antenna for 2.4 to 2.5 GHz Bluetooth and IEEE 802.11 devices
- Designed for easy connection to radio cards
- Utilizes Centurion's patented PCB Microsphere technology
- Has a ground plane incorporated into the resonator structure, therefore no additional ground plane is required to radiate efficiently

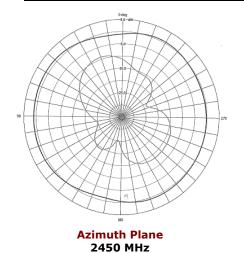
## **Specifications:**

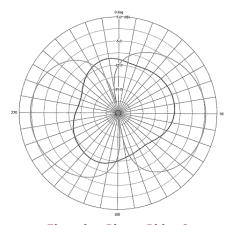
Specifications:	
Frequency Range	2.4 - 2.5 GHz
Polarization	Linear
Peak Gain	1.5 dBi
Average Gain	>0 dBi
Nominal Impedance	50 ohms
VSWR (Min. Performance)	< 1.8:1 from 2.4 GHz to 2.5 GHz 2:1 VSWR Bandwidth > 600 MHz
<b>Temperature Range</b>	-40° to +85°C
Vibration	6G RMS (9.04g2/Hz) for 15 minutes each in vertical and horizontal. No appearance or functional axis.
Thermal Shock	Change after 4 repeated cycles of 1 hr. at +85°C and 1 hr. at -40°C. Transfer time is 5 min.
Size (inches)	.89" x 1.88" x .032" (w x l x t)
Standard Cable	RG-178 (MIL-C17) Coaxial Cable x 8" Long
Standard Connector	Right-Angle MMCX Plug

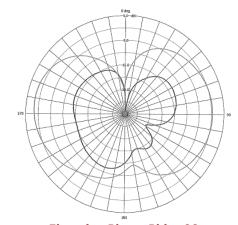




MicroBlue 2.4 shown here with standard 8 inches of RG-178 coax and right angle MMCX connector







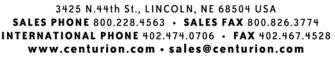
Elevation Plane, Phi = 0 2450 MHz

Elevation Plane, Phi = 90 2450 MHz

Specifications subject to change without notice

MicroBlue - 10/28/02











TECHNICAL DATA

R380.500.117

Issue : **0039** 

Series : ANTENNA

Page **1** / **1** 

00

DIPOLE PIGTAIL 2450 MHz

molding line
.002
(0.05 maxi)

texture
Mold-tech 11010

501

002
(0.05 maxi)

In 2 \*1.18
(305 \* 30)

DIA 2.047 \* .039
(652 \* 11)

DIA 2.205 \* .02

ELECTRICAL SPECIFICATIONS

Operating frequency range :2400-2500 MHz

VSWR :2:1 Impedance :50  $\Omega$ 

Polarization :Vertical (antenna axis)

Vertical 3 dB beamwidth :80° Gain :2 dBi Gain including cable :1 dBi

Radiation pattern :Omni directionnal in the

Horizontal plane

 $(Ø56 \pm 0.5)$ 

Power input :2 Watt

MECHANICAL SPECIFICATIONS

Weight :50,2g

Connector :polarized SMA PLUG Color :Black(RAL 9004)

radome material :TPE(thermo.poly.elast.)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature  $:-30\,^{\circ}\text{C}$  to  $+85\,^{\circ}\text{C}$  Humidity :Up to  $100\%\,^{\circ}\text{@}38\,^{\circ}\text{C}$ 

COSMETIC PARAMETERS

No scrathes No mold release No sink marks No brigth spots

Initiated on

25/04/00

The information given here is subject to change without notice. Design changes may be in order to inprove the product



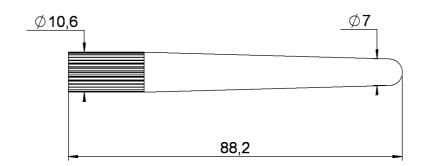
## STRAIGHT DIPOLE SMA 2.4GHZ

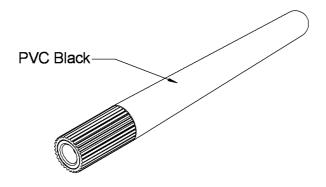
### **OMNIDIRECTIONAL ANTENNA**

R380.500.116

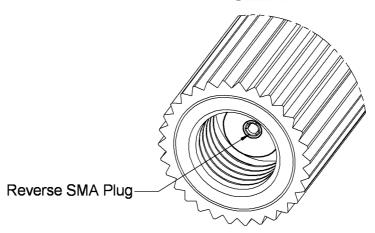
Series: ANTENNE

Scale 1:1





Scale 4:1



All dimensions are in mm



Issue: 0241 A

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

RADIALL/LARSEN antenna technologies

#### TECHNICAL DATA SHEET

### STRAIGHT DIPOLE SMA 2.4GHZ

# $R380.500.11\overline{6}$

### **OMNIDIRECTIONAL ANTENNA**

Series: ANTENNE

# **ELECTRICAL CHARACTERISTICS**

Frequency:	<b>2.4-2.5</b> GHz
Nominal Impedance :	50 Ω
VSWR :	2 Max
Gain (Overall gain):	2 dBi
Radiation Pattern -3 dB beamwidth	Omni-directional in the horizontal plane
Vertical Plane:	<b>80</b> °
Polarization:	VERTICAL
Connector type :	Reverse SMA Plug
MECHANICAL CH	HARACTERISTICS
Plastic radome :	PVC
Color :	BLACK RAL 9004
Weight:	<b>9</b> g
Overall length:	<b>88</b> mm
ENVIRONMENTAL (	<u>CHARACTERISTICS</u>
Operating temperature :	<b>-40</b> /+ <b>70</b> ° C
Humidity:	<b>Up to 100%</b> @ 38° C

Issue: 0241 A

In the effort to improve our products, we reserve the right to make changes judged to

be necessary.

