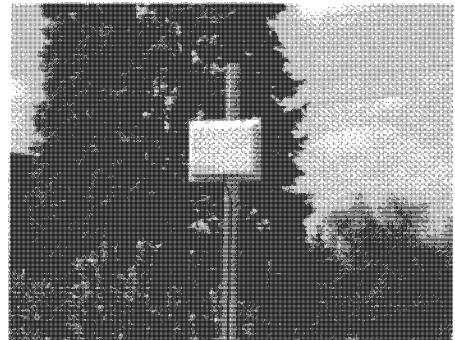
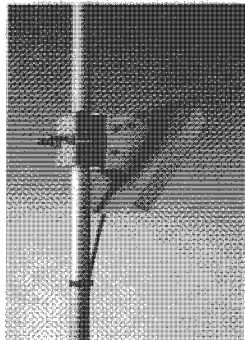
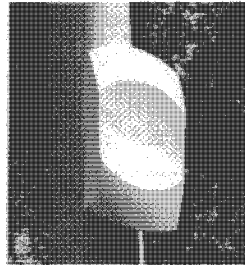
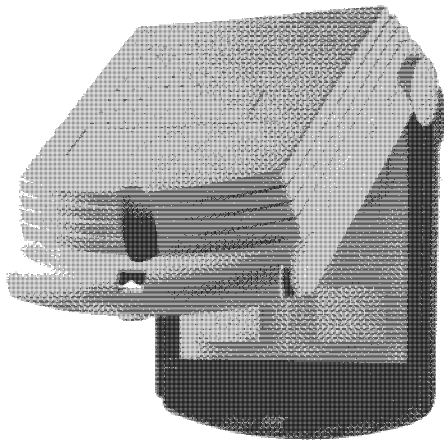


Wireless Local Loop

Global RF Solution.
One Source : from the Antenna to the PCB

Embedded or external patch array antennas

- High gain
- Low profile
- Excellent front to back ratio
- Versatile mounting systems
- Low loss coaxial cable assemblies
- Cost effective



DECT 1900 MHz

Rad-Air technology is an excellent compromise between performance and cost effectiveness for Wireless Local Loop application. It also permits an easy integration into subscriber unit due to the low profile.

Rad-Lite technology is especially adapted to obtain high gain whilst remaining visually discreet due to the patch array antenna being enclosed inside the radom.

The antenna's articulating mount allows to locate and position the antenna anywhere and focus it's precise pattern where needed.

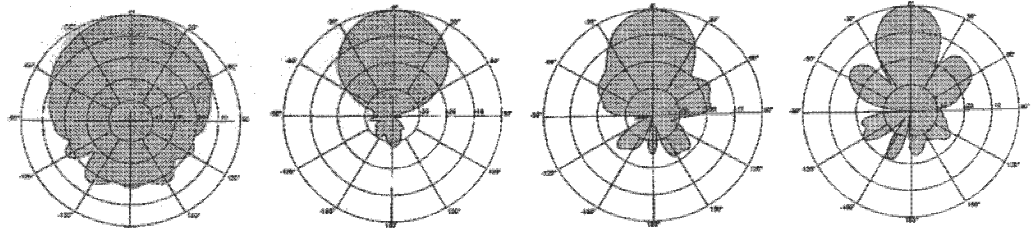
RADIALL is able to offer a wide range of coaxial connectors and different cable types. The low loss coaxial cable assembly enables distancing the Radio PCB from the antenna. Pigtail lengths can be modified upon request.

Part Number	R380.400.007	R380.400.210	R380.400.207	R380.400.204
Antenna type	Embedded single patch	Embedded patch array	External patch array	External printed dipole array

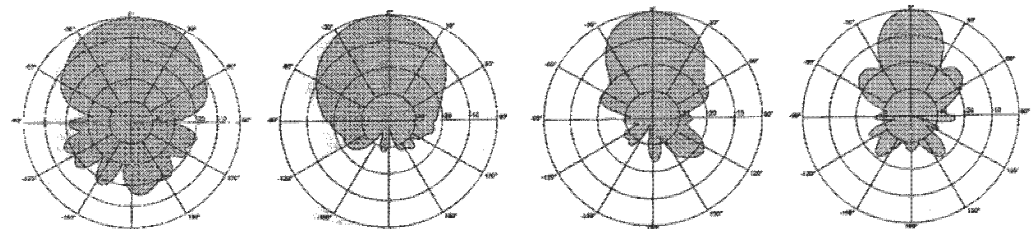
Electrical specifications				
Operating frequency range	1880 - 1930 MHz	1880 - 1930 MHz	1880 - 1930 MHz	1880 - 1930 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	1.5 : 1 max	1.5 : 1 max	1.5 : 1 max	1.5 : 1 max
Gain	8.5 dBi	10 dBi	9 dBi	12 dBi
Horizontal plane beamwidth (-3 dB)	64°	42°	34°	31°
Vertical plane beamwidth (-3 dB)	60°	55°	47°	31°
Side lobe level	NA	- 28 dB	-20 dB	- 13 dB
Polarisation	Linear vertical	Linear vertical	Linear vertical	Linear vertical
Cross polarisation	- 15 dB	- 20 dB	- 20 dB	- 20 dB
Front to back ratio	- 15 dB	- 28 dB	- 15 dB	- 15 dB
Power input	20 W	20 W	20 W	20 W

Mechanical specifications				
Operating temperature	-40°C to +90°C	-40°C to +90°C	-40°C to +90°C	-40°C to +90°C
Mounting			Wall / mast (vertical ± 30°)	Wall / mast (vertical ± 30°)
Dimensions	110 x 110 x 15 mm	200 x 150 x 20 mm	250 x 210 x 30 mm	285 x 285 x 30 mm
Plastic radom			UV resistant ABS	UV resistant ABS
Ingress protection			IP65	IP65
Connector	SMA	F	SMA	SMA

Horizontal



Vertical



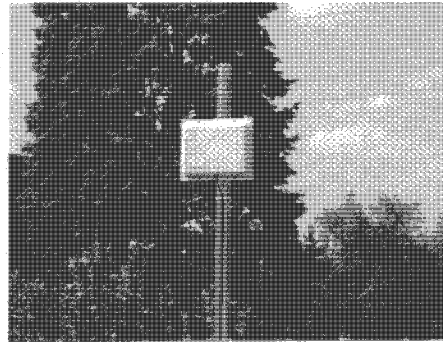
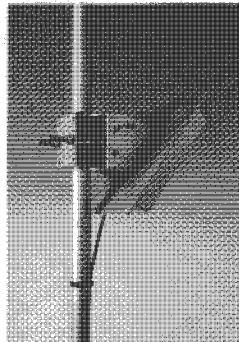
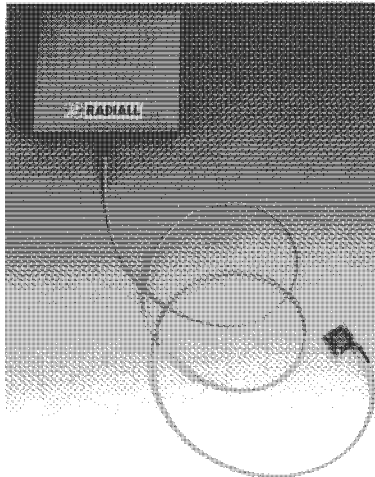
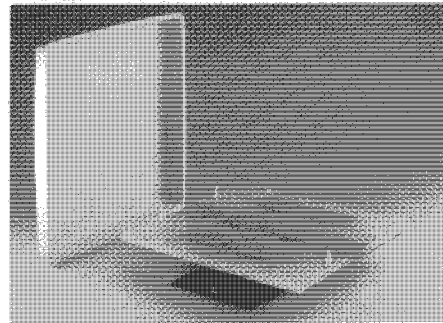
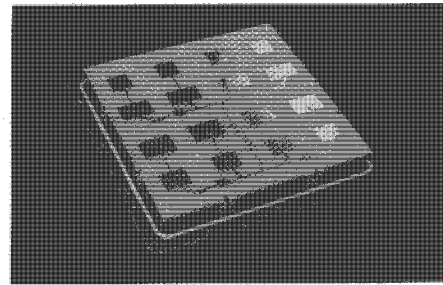
Wireless Local Loop

Global RF Solution.
One Source : from the Antenna to the PCB

3.5 GHz

Embedded or external patch array antennas

- High gain
- Wide bandwidth
- Low side lobe level
- Excellent Front to back ratio
- Low profile
- Easy to connect on PCB : plug in system
- Monolithic construction
- Low loss dielectric material



Rad-Lite technology enables excellent performances for 3.5 GHz applications. Rad-Lite technology uses a specific silk-screen printed process on a low cost dielectric material.

Based on a monolithic construction, Rad-Lite technology is adapted to serve the needs of higher production volume. Rad-Lite technology offers the ultimate in repeatability for production at this high frequency.

RADIALL antennas' pattern can be directed precisely into the desired coverage area due to its articulating mounting system.

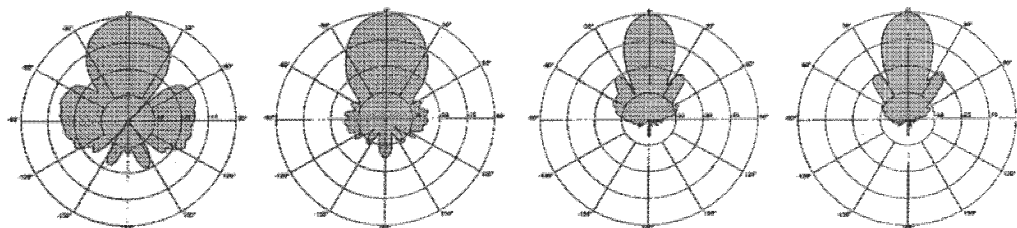
RADIALL is able to offer a wide range of coaxial connectors and different cable types. The low loss coaxial cable assembly enables distancing the Radio PCB from the antenna. Pigtail lengths can be modified upon request.

Part Number	R380.500.201	R380.500.205	R380.500.204	R380.500.202
Antenna type	Embedded patch array	Embedded patch array	Embedded patch array	External patch array

Electrical specifications				
Operating frequency range	3400 - 3600 MHz	3400 - 3600 MHz	3400 - 3600 MHz	3400 - 3600 MHz
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
VSWR	1.5 : 1 max	1.5 : 1 max	1.5 : 1 max	1.5 : 1 max
Gain	10 dBi	13.5 dBi	17.5 dBi	17.5 dBi
Horizontal plane beamwidth (-3 dB)	36°	26°	21°	20°
Vertical plane beamwidth (-3 dB)	40°	30°	23°	20°
Side lobe level	-13 dB	-20 dB	-23 dB	-23 dB
Polarisation	Linear vertical	Linear vertical	Linear vertical	Linear vertical
Cross polarisation	-18 dB	-20 dB	-17 dB	-17 dB
Front to back ratio	-20 dB	-20 dB	-23 dB	-23 dB
Power input	20 W	20 W	20 W	20 W

Mechanical specifications				
Operating temperature	-40°C to +90°C	-40°C to +90°C	-40°C to +90°C	-40°C to +90°C
Mounting				Wall / mast (vertical ± 30°)
Dimensions	110 x 110 x 6.5 mm	180 x 180 x 6.5 mm	250 x 255 x 30 mm	257 x 257 x 30 mm
Plastic radom				UV resistant ABS
Ingress protection				IP 55
Connector	MCX Slide-on	MCX Slide-on	MCX Slide-on	SMA or other types upon request

Horizontal



Vertical

