# Cellular (4G/5G) Smart Antennas

Location-aware Smart Antennas for signal repeaters and cellular gateway devices.

Welcome to a true revolution in antenna technology - location-aware antennas that automatically adapt to their surroundings.

Powered by our innovative ZetiLink<sup>™</sup> technology, Zetifi Smart Antennas use onboard sensors, a dual gain antenna whip, and integrated data processor to optimise coverage. The Smart Antenna detects whether you're in flat or hilly terrain using a pre-loaded terrain map and automatically switches between high and low gain modes in real-time to maximise signal for your repeater or cellular gateway.

Experience better coverage than ever with the convenience and enhanced performance of a Zetifi Smart Antenna.









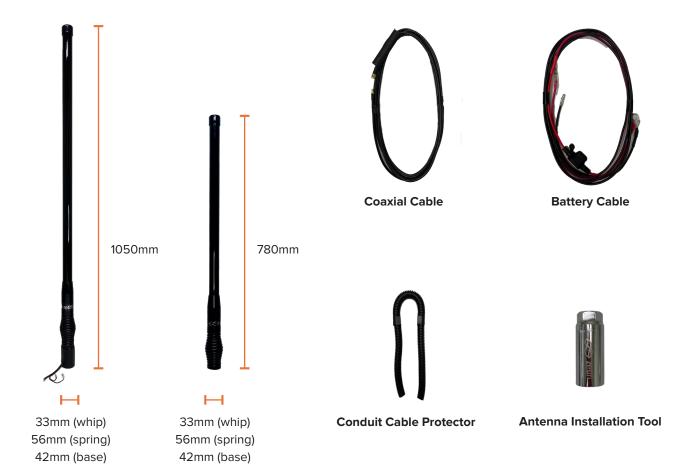
- Dual gain antenna whip offers high and low gain modes in a single antenna.
- Smart band selection and device optimisation for Nextivity CEL-FI ROAM R41 Repeaters.
- Boost control of CEL-FI ROAM R41 Repeater to turn off device in strong signal areas.
- Satellite ready with full compatibility across all direct-to-handset frequencies.
- Integrated GPS and processor to detect vehicle location and optimise coverage in real-time.
- Download Zetifi Smart Antenna app to register, monitor and manage your device.



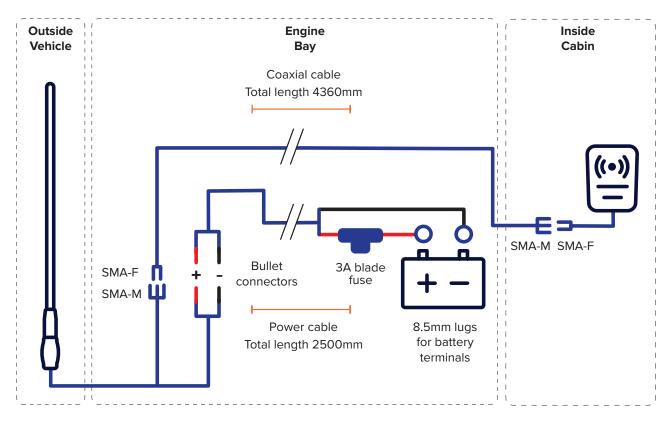




# **Physical Dimensions and Kit Components**



# **Wiring Diagram**



Not to scale

# 1050mm Technical Specifications (ANCA1101AU / ANCA1102AU)

SMART FEATURES

VSWR



Automatic switching between high and low gain modes



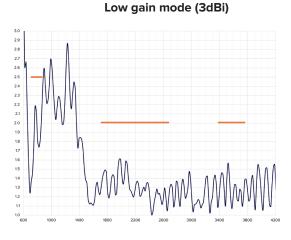
Active band selection to maximise CEL-FI uptime.



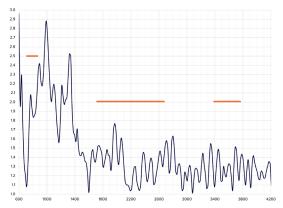
Boost control to turn off device when not needed.

### **Nominal VSWR**

VSWR tests completed with included 4360mm LMR195 coaxial extension cable.



High gain mode (6.5dBi)



Frequency (MHz)

Frequency (MHz)

Antenna	Perf	form	ance
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Frequencies	698-900 MHz, 1710-2700 MHz, 3400-3800 MHz	
Antenna Gain	3dBi in low gain mode 6.5dBi in high gain mode	
Vertical Beamwidth	50/30/20 in low gain mode 25/15/10 in high gain mode	
VSWR	<2.5:1 @ 698-900 MHz, <2:1 @ 1710-2700 MHz, <2:1 @ 3400-3800 MHz	
Nominal Impedance	50 Ω	

# **Processor Electrical**

Input Voltage	Min 12V DC to Max 18V DC
Input Current	60 mA
Input Power	0.7 W

## Mechanical

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Construction	Fibreglass whip with reconfigurable low/high gain PCB antenna element Steel ferrule with integrated PCB ZetiLink™ controller board Bellied spring
Mounting	M14 threaded stud & nut
Mounting Hole	16mm mounting hole
Dimensions	Height: 1050mm total / 960mm antenna whip Width: 33mm (antenna whip) / 56mm (spring) / 42mm (base)
Weight	1250g antenna weight / 2310g package weight with cabling
Integrated antenna cables	145mm RG316 low loss coaxial cable terminated with SMA male connector 215mm 20AWG automotive power cable terminated to bullet connectors
Battery cable	2500mm 16AWG automotive power cable with 3A blade fuse terminated to bullet connectors (antenna end) and 8.5mm lugs (battery terminal end)
Coaxial cable	4360mm LMR195 coaxial cable terminated to SMA female (antenna end) and SMA

male (device end)

# 780mm Technical Specifications (ANCA1103AU / ANCA1104AU)





Automatic switching between high and low gain modes



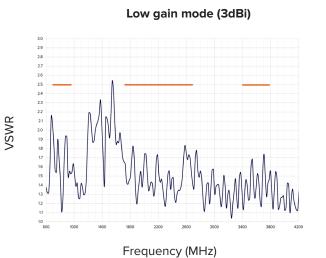
Active band selection to maximise CEL-FI uptime.

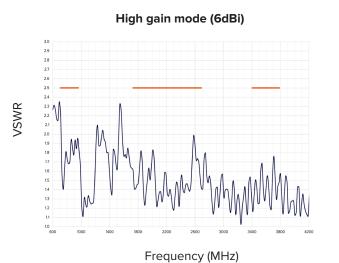


Boost control to turn off device when not needed.

### **Nominal VSWR**

VSWR tests completed with included 4360mm LMR195 coaxial extension cable.





## **Antenna Performance**

Frequencies	698-960 MHz, 1710-2700 MHz, 3400-3800 MHz		
Antenna Gain	3dBi in low gain mode 6dBi in high gain mode		
Vertical Beamwidth	40/40/30 in low gain mode 30/30/20 in high gain mod		
VSWR	<2.5:1 @ 698-960 MHz, <2.5:1 @ 1710-2700 MHz, <2.5:1 @ 3400-3800 MHz		
Nominal Impedance	50 Ω		

# **Processor Electrical**

Input Voltage	Min 12V DC to Max 18V DC	
Input Current	60 mA	
Input Power	0.7 W	

## Mechanical

Coaxial cable

Construction	Fibreglass whip with reconfigurable low/high gain PCB antenna element Steel ferrule with integrated PCB ZetiLink™ controller board Bellied spring
Mounting	M14 threaded stud & nut
Mounting Hole	16mm mounting hole
Dimensions	Height: 780mm total / 690mm antenna whip Width: 33mm (antenna whip) / 56mm (spring) / 42mm (base)
Weight	1116g antenna weight / 2176g package weight with cabling
Integrated antenna cables	145mm RG316 low loss coaxial cable terminated with SMA male connector 215mm 20AWG automotive power cable terminated to bullet connectors
Battery cable	2500mm 16AWG automotive power cable with 3A blade fuse terminated to bullet connectors (antenna end) and 8.5mm lugs (battery terminal end)

male (device end)

4360mm LMR195 coaxial cable terminated to SMA female (antenna end) and SMA

# **Ordering Guide**

All Zetifi Smart Antennas are available as antenna only or as a bundled solution with the CEL-FI ROAM R41 Signal Repeater from Nextivity.

Included Smart Antenna	Order Code	Description
ANCA1101AU 1050mm Black	ANCA1101AU-02	Cellular (4G/5G) Smart Antenna - 1050mm Black
	ANCA1101AU-04	CEL-FI ROAM R41 Vehicle Booster Pack - 1050mm Black
ANCA1102AU	ANCA1102AU-02	Cellular (4G/5G) Smart Antenna - 1050mm Black
1050mm Black	ANCA1102AU-04	CEL-FI ROAM R41 Vehicle Booster Pack - 1050mm Black
ANCA1103AU 780mm Matte Black	ANCA1103AU-02	Cellular (4G/5G) Smart Antenna - 780mm Black
	ANCA1103AU-04	CEL-FI ROAM R41 Vehicle Booster Pack - 780mm Black
ANCA1101AU 780mm Matte Black	ANCA1104AU-02	Cellular (4G/5G) Smart Antenna - 780mm Matte Black
	ANCA1104AU-04	CEL-FI ROAM R41 Vehicle Booster Pack - 780mm Matte Black



Q For more info visit zetifi.com/smartantennas or call us on 1300 093 711

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