4G LTE IRIDIUM DAB DMB DVBT AIS VARIABLE DIPOLES

Catalogue

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Introduction

2J is a worldwide supplier of antenna solutions casting our net over Automotive, Marine, Telematic, Automation and M2M markets.

With our two RF development sites in the UK and Slovakia, we have developed a reputation for engineering excellence and self-sufficiency, allowing us to provide rapid custom antenna solutions, supplementing our extensive range of off-the-shelf antenna.

We utilise a plethora of modern engineering tools, from network analysers and anechoic chambers, to simulation software and 3D printers. These tools help reduce design phases, and enable us to react to our customers' needs promptly and efficiently.

Our ISO/TS16949:2009 certified production site in Central Europe ensures production of the highest quality products. Our antennas are all manufactured under the RoHS directive and are REACH compliant. Plastic injection, SMD pick and place, product assembly and quality control are all carried out in house, aiding us to be flexible in manufacturing and provide competitively priced products.

Our close-knit team of engineers and commercial personnel have established strong bonds with customers and suppliers, ensuring a good communication of needs, requirements and solutions.

Ensuring the continued development of products to meet the rapidly evolving wireless world remains our primary focus, be it for 4G (LTE), Iridium communications or Galileo satellite based applications. We work closely with technological innovators to ensure that we have a clear vision for future projects, maintaining our strong position in commercial antenna design.

ISO/TS 16949:2009
Automotive standards

EN ISO 14001:2004
Environmental

- Customisation
- RF measurement
- 3D anechoic chambers
- EM Simulations
- Prototyping service
- 3D printing
- Plastic injection
- Coaxial cable assembly

Note: Cable types, lengths, connector types and housing colour upon request.

4G/LTE

2J6A24B

LTE (Cable 1)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2 dBi Max.
VSWR	< 2.5:1
Power handling	25 W

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	65.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

4G/LTE MIMO

2J6A24Ba

LTE (Cable 1)

Frequencies	4G/LTE (699-960 / 1710-2170 / 2500-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	3 dBi typ.
VSWR	699-960 MHz < 5:1 / 1710-2690 MHz < 3:1
Power handling	25 W

LTE (Cable 2)

Frequencies	4G/LTE (699-960 / 1710-2170 / 2500-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	3 dBi typ.
VSWR	699-960 MHz < 5:1 / 1710-2690 MHz < 3:1
Power handling	25 W

General specification

IP certificate	P67, IK09, IP69K
Dimensions	65.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

4G/LTE, GPS/GLONASS

2J6A41BG

LTE (Cable 1)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2 dBi Max.
VSWR	< 2.5:1
Power handling	25 W

Navigation (Cable 2)

Frequencies	GPS/GLONASS (1572-1610 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3V / 24 dB at 5 V
VSWR	< 1.2:1
Voltage supply	2,7 V - 5,5 V
Current	15 mA to 25 mA
Power (max.)	138 mW

General specification

IP certificate	P67, IK09, IP69K
Dimensions	65.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

4G/LTE MIMO, GPS/GLONASS

2J6A41BGa

LTE (Cable 1)

Frequencies	4G/LTE (699-960 / 1710-2170 / 2500-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	3 dBi typ.
VSWR	699-960 MHz < 5:1 1710-2690 MHz < 3:1
Power handling	25 W

LTE (Cable 2)

Frequencies	4G/LTE (699-960 / 1710-2170 / 2500-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	3 dBi typ.
VSWR	699-960 MHz < 5:1 1710-2690 MHz < 3:1
Power handling	25 W

Navigation (Cable 3)

Frequencies	GPS/GLONASS (1572-1610 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3V/24 dB at 5 V
VSWR	< 1.2:1
Voltage supply	2,7 V - 5,5 V
Current	15 mA to 25 mA
Power (max.)	138 mW

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	65.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

4G/LTE
2JW0124

Frequencies	4G/LTE (699-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	3 dBi Ave.
VSWR	<3:1 ; <5:1 at 2500-2690MHz

General specification

Dimensions	196 x 38 x 1 3.8 mm (H x W x T)
Operating temperature	-40 °C to +85 °C

4G/LTE
2J680

2J680M
2J680P
2J680B

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2 dBi Max.
VSWR	< 2.5:1
Power handling	25 W

General specification

Dimensions	117 x 38 x 49.5 mm (L x H x W)
Operating temperature	-40 °C to +85 °C

4G/LTE, GPS

2J6541B

2J6541M

LTE (Cable 1)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	5 dBi
VSWR	< 6:1
Power handling	50 W

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.15 dB
Polarisation	RHCP
LNA Gain	23 dB at 3V, 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA – 25 mA
Power (max.)	138 mW

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	Body mount: 146 x 32 mm (D x H) Magnetic: 135.5 x 30 mm (D x H)
Operating temperature	-40 °C to +85 °C

4G/LTE MIMO, GPS

2J6541Ba

2J6541Ma

LTE (Cable 1)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	5 dBi
VSWR	< 6:1
Power handling	25 W

LTE (Cable 2)

Frequencies	4G/LTE (791-960/1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	5 dBi
VSWR	< 6:1
Power handling	25 W

Navigation (Cable 3)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3V 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	Body mount: 146 x 32 mm (D x H) Magnetic: 135.5 x 30 mm (D x H)
Operating temperature	-40 °C to +85 °C

4G/LTE MIMO

2J6524Ba

2J6524Ma

LTE (Cable 1)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	5 dBi Max.
VSWR	< 6:1
Power handling	50 W

LTE (Cable 2)

Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	5 dBi Max.
VSWR	< 6:1
Power handling	50 W

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	Body mount: 146 x 32 mm (D x H) Magnetic: 135.5 x 30 mm (D x H)
Operating temperature	-40 °C to +85 °C

4G/LTE with diagnostic resistor

2J520R

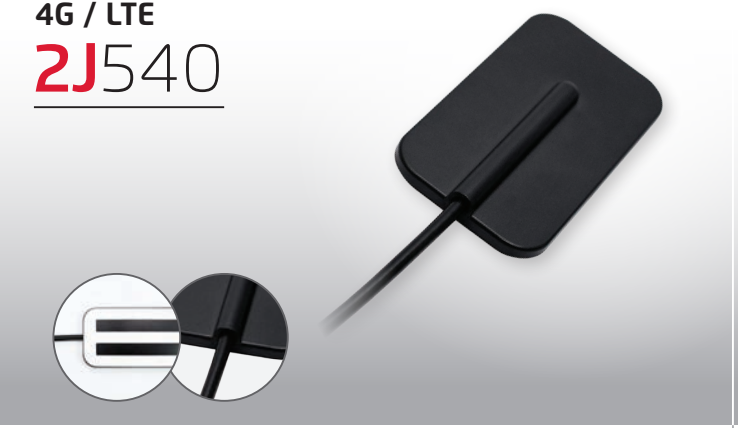
Frequencies	4G/LTE (791-960 / 1710-2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2.14 dBi
VSWR	Full 4G/LTE < 5:1 / Europe: < 2:1
Power handling	25 W
Note	With 10k diagnostic resistor

General specification

Dimensions	6.7 × 12.5 × 17.4 mm (H x W x L)
Operating temperature	-40 °C to +85 °C

4G / LTE

2J540



Frequencies	4G/LTE (699-960 / 1710 / 2690 MHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2.14 dBi
VSWR	< 3.6:1
Power handling	50 W

General specification

Dimensions	11.3 × 60 × 112.5 mm (H x W x L)
Operating temperature	-40 °C to +85 °C

IRIDIUM CERTIFIED

2J6026M

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3 dBiC
Patch size	35 x 35 x 3 mm
VSWR	< 1.5:1

General specification

Dimensions	13 x 80 x 76 mm (H x W x L)
Operating temperature	-40 °C to +85 °C

IRIDIUM CERTIFIED

2J6726B

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3 dBiC
VSWR	< 1.5:1
Patch size	35 x 35 x 3 mm

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	36.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

IRIDIUM, GPS/GLONASS

2J6033MG

2J6033BG

LTE (Cable 1)

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3-5 dBiC
VSWR	< 1.5:1

GNSS (Cable 2)

Frequencies	GPS/GLONASS (1.572-1.610 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3 V, 24 dB at 5 V
VSWR	< 1.2:1
Voltage supply	2.7 V - 5.5 V
Current	15 mA – 25 mA
Power (max.)	138 mW

General specification

Dimensions	Magnetic version: 13 x 80 x 76 mm (H x W x L) Body mount version: 16 x 80 x 76 mm (H x W x L)
Operating temperature	-40 °C to +85 °C

IRIDIUM

2J9126B

2J9126P

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3-5 dBiC
VSWR	< 1.5:1
Patch size	35 x 35 x 3 mm

General specification

IP certificate	IP67
Dimensions	34,9 x 74 mm (H x D)
Operating temperature	-40 °C to +85 °C

IRIDIUM, GPS

2J6A33B

IRIDIUM (Cable 1)

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3-5 dBiC
VSWR	< 1.5:1

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.15 DB typ
Polarisation	RHCP
LNA Gain	23 dB at 3V, 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

General specification

IP certificate	IP67, IK09, IP69K
Dimensions	65.5 x 77.3 mm (H x D)
Operating temperature	-40 °C to +85 °C

IRIDIUM, GSM, GPS/GLONASS

2J9048H

In development

Iriduim (Cable 1)

Frequencies	IRIDIUM (1.616-1.626 GHz)
Impendance	50 Ohms
Polarisation	RHCP
Gain	3 dBiC
VSWR	< 1.5:1

Mobile (Cable 2)

Frequencies	AMPS (850 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz) WIFI / BLUETOOTH (2.4 GHz)
Impendance	50 Ohms
Polarisation	Linear
Gain	2.2 dBi Max.
VSWR	< 2:1
Power handling	50 W

Navigation (Cable 3)

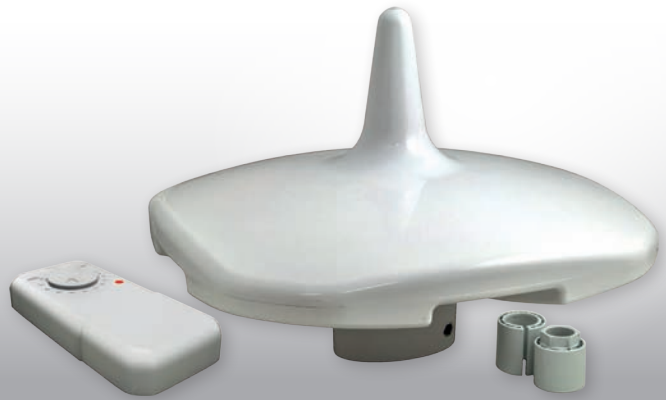
Frequencies	GPS/GLONASS (1572-1610 MHz)
Impendance	50 Ohms
Noise figure	1.15 dB
Polarisation	RHCP
Patch Gain	3 dBiC min at zenith.
LNA Gain	23 dB at 3V, 24 dB at 5V
VSWR	< 1.2:1
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW

General specification

IP certificate	IP67
Dimensions	192.15 x 110 x 74 mm (H x W x D)
Operating temperature	-40 °C to +85 °C

DVBT, FM

2J9438



Antenna

Frequencies	FM (87,5-108 MHz), DVB-T (440-870 MHz)
Impendance	75 Ohms
Polarisation	Linear
Gain	3 dBi
Power handling	50 W
Dimensions	212 x 280 x 280 mm (H x W x L)

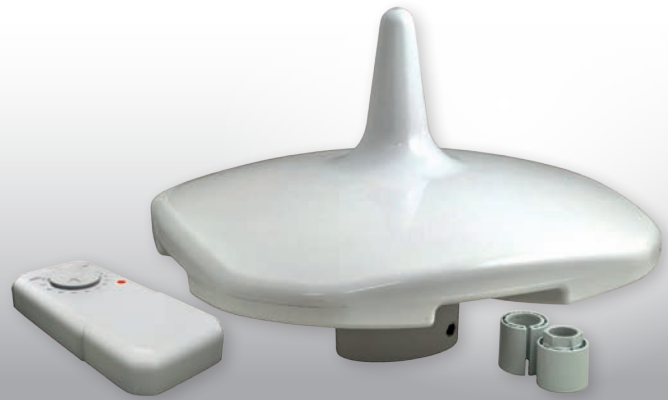
Amplifier

Frequencies	80 MHz to 1 GHz
Impendance	75 Ohms
LNA Gain	Variable from: -7 dB to 29 dB
Voltage supply	10.8 V to 32 V
Current	70 mA to 115 mA
Power (max.)	1.2 W
Dimensions	19.8 x 280 x 280 mm (H x W x L)

General specification

IP certificate	IP69K for antenna
Operating temperature	-25 °C to +55 °C

DVBT, GPS/GLONASS
2J9430



DVB-T/FM (Cable 1)

Frequencies	FM (87,5-108 MHz), DVB-T (440-870 MHz)
Impendance	75 Ohms
Polarisation	Linear
Gain	3 dBi
Power handling	50 W
Dimensions	212 x 280 x 280 mm (H x W x L)

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.2 dB
Polarisation	RHCP
Patch size	25 x 25 x 4 mm
Patch Gain	2-3 dBiC
LNA Gain	23 dB at 3V; 24 dB at 5V
Voltage supply	2,7 V - 5,5 V
Current	15 mA to 25 mA
Power (max.)	138 mW
Note	Filter placed after amplifier

Amplifier

Frequencies	80 MHz to 1 GHz
Impendance	75 Ohms
LNA Gain	Variable from: -7 dB to 29 dB
Voltage supply	10.8 V to 32 V
Current	70 mA to 115 mA
Power (max.)	1.2 W
Dimensions	19.8 x 280 x 280 mm (H x W x L)

General specification

IP certificate	P69K for antenna
Operating temperature	-25 °C to +55 °C

DVBT
2J9013

Frequencies	DVB-T (440-870 MHz)
Impendance	75 Ohms
Polarisation	Vertical
LNA Gain	25 dBi
VSWR	< 3:1
Power handling	25 W
Voltage supply	5 V - 30 V
Current	13 mA
Power (max.)	390 mW

General specification

IP certificate	IP67
Dimensions	233.3 x 110 x 74 mm (H x W x D)
Operating temperature	-40 °C to +85 °C

DAB
2JDAB02

Frequencies	DAB (174-240 MHz)
Impendance	50 Ohms
Noise figure	2 dB
Polarisation	Linear
LNA Gain	14 dBi
Gain	2 dBi nom.
Voltage supply	6 V - 16 V
Current	20mA typ.

General specification

Dimensions	140 x 39 x 5.5 mm (W x H x T)
Operating temperature	-40 °C to +85 °C

Glass mount antenna for GPS, DAB

2J4445P

Navigation (Cable 1)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.15 dB typ.
Polarisation	RHCP
Patch size	18 x 18 x 4 mm
LNA Gain	23 dB at 3V, 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

DAB (Cable 2)

Frequencies	DAB (150-240 MHz)
Impendance	50 Ohms
Noise figure	2.5 dB typ.
Polarisation	Linear
LNA Gain	14 dBi
Voltage supply	5 V - 16 V
Current	10 mA - 14 mA
Power (max.)	224 mW max.

General specification

IP certificate	IP67
Dimensions	160.9 x 76.4 x 15.9 mm (W x H x T)
Operating temperature	-40 °C to +85 °C

Glass mount antenna for GPS, GSM

2J4400P

Mobile (Cable 1)

Frequencies	AMPS (824-894 MHz), ISM (868 MHz) GSM (900 MHz), DCS (1800 MHz) PCS (1900 MHz), 3G (UMTS 2.1 GHz)
Impendance	50 Ohms
Polarisation	Horizontal
Gain	GSM: 2 dBi typ.
VSWR	< 2:1
Power handling	35 W
Note	With 10k diagnostic resistor

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.15 dB typ.
Polarisation	RHCP
LNA Gain	23 dB at 3V, 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

General specification

IP certificate	IP67
Dimensions	160.9 x 76.4 x 15.9 mm (W x H x T)
Operating temperature	-40 °C to +85 °C

Glass mount antenna for GPS, UHF

2J4407P

Tetra (Cable 1)

Frequencies	UHF (380-400 MHz)*
Impendance	50 Ohms
Polarisation	Linear
Gain	2.2 dBi typ.
VSWR	< 2:1
Power handling	25 W

*Center freq. can be tuned up to 500MHz

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Noise figure	1.15 dB typ.
Polarisation	RHCP
LNA Gain	23 dB at 3V, 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

General specification

IP certificate	IP67
Dimensions	160.9 x 76.4 x 15.9 mm (W x H x T)
Operating temperature	-40 °C to +85 °C

DVBT, GPS

2J8530B

DVBT (Cable 1)

Frequencies	DVB-T (440-870 MHz)
Impendance	50 Ohms
Polarisation	Vertical
LNA Gain	23 dBi
VSWR	< 3:1
Power handling	25 W
Voltage supply	3.3 V - 16 V
Current	13 mA
Power (max.)	390 mW

Navigation (Cable 2)

Frequencies	GPS (1575.42 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3V; 24 dB at 5V
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

General specification

IP certificate	IP67
Dimensions	137 x 143 x 60 mm (H x L x W)
Operating temperature	-40 °C to +85 °C

DVBT, GPS / GLONASS

2J7530B

2J7530M

DVBT (Cable 1)

Frequencies	DVB-T (440-870 MHz)
Impendance	50 Ohms
Polarisation	Vertical
LNA Gain	23 dBi
VSWR	< 3:1
Power handling	25 W
Voltage supply	3.3 V - 16 V
Current	13 mA
Power (max.)	390 mW

Navigation (Cable 2)

Frequencies	GPS / GLONASS (1572-1610 MHz)
Impendance	50 Ohms
Noise figure	1.2 nominal
Polarisation	RHCP
LNA Gain	23 dB at 3V; 24 dB at 5V
VSWR	< 1.2:1
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.

General specification

IP certificate	IP67, IP69K
Dimensions	Body mount: 100.5 x 60 mm (H x D), Magnetic mount: 96.1 x 54 mm (H x D)
Operating temperature	-40 °C to +85 °C

GPS / GLONASS, AIS

2J9237

Navigation (Cable 1)

Frequencies	GPS / GLONASS (1572-1610 MHz)
Impendance	50 Ohms
Polarisation	RHCP
LNA Gain	23 dB at 3V, 24 dB at 5V
VSWR	< 1.2:1
Voltage supply	2.7 V - 5.5 V
Current	15 mA to 25 mA
Power (max.)	138 mW max.
Note	Antenna is filtered

AIS (Cable 2)

Frequencies	AIS (162 MHz)
Impendance	50 Ohms
Polarisation	Linear
VSWR	< 2:1
Power handling	25 W

General specification

IP certificate	IP67
Dimensions	248 x 110 x 74 mm (H x W x D)
Operating temperature	-40 °C to +85 °C

Variable dipole 380MHz – 2,4GHz

2JD07xx

Frequencies	380 MHz up to 2.4 GHz
Impendance	50 Ohms
Polarisation	Lineas
Bandwidth	40 MHz +/- 5 MHz
Gain	2 dBi Max.
VSWR	< 2:1

General specification

Dimensions	24.8 × 13.6 × -- mm (H × T × W)
Operating temperature	-40 °C to +85 °C

2J s.r.o
Stefanikova 61
085 01 Bardejov
Slovak Republic

+421 54 4880130
sales@2j-antennae.com

2J Ltd.
21-22 The Slipway
Marina Keep, Port Solent
Hampshire, PO6 4TR, **United Kingdom**

+44 (0)2392 385985
steve@2j-antennae.com

2J
antenna conceptor

WWW.2J-ANTENNAE.COM