

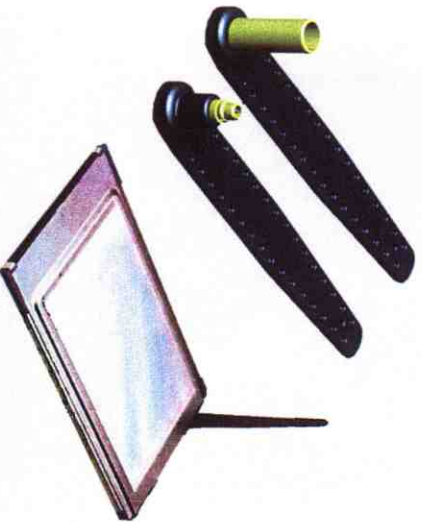
Flexiblade

The 'Flexi-blade' antenna (BL series) is designed and developed for use with handheld and portable equipment. This robust antenna is moulded within a material that offers a high degree of flexibility and durability. The antenna is able to rotate to fold alongside the unit for easy packing and transport.

The 'Flexi-blade' is ideally suited for use with PCMCIA radio modem cards and hand held data units such as barcode readers and small radio devices for fixed locations.

BL-series antennas are available for GSM900/1800 dual band or 2.4GHz with overall dimensions of 60x7mm. Connectors currently available are MMCX and SMA Nano, both allowing 360 degree rotation.

The initial concept of these BL-series antennas can be tailored around customer specific units. Alternative coaxial or single point connectors can be applied to this design.



Panorama is a member of the
Bluetooth Special Interest Group

Bluetooth™

Antennas For Portable Applications

Antennas for portable radio equipment cover a wide range of applications. This leaflet summarises the product groups available from Panorama Antennas:

- Fixed flexible antennas for 67 to 2400 MHz
- Rotating 'Flexiblade' antennas for PC card modems for 870 to 2400 MHz
- Other communications and telemetry applications.

For each product group Panorama offers options to suit most customer requirements including:

- Compatibility with radio model and connector type.
- Required frequency range and performance criteria.
- Budget constraints and size limits.



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CONCEPT ➤ DESIGN ➤ MANUFACTURE

**PANORAMA
ANTENNAS**



**Antennas
For Portable
Applications**

Portables

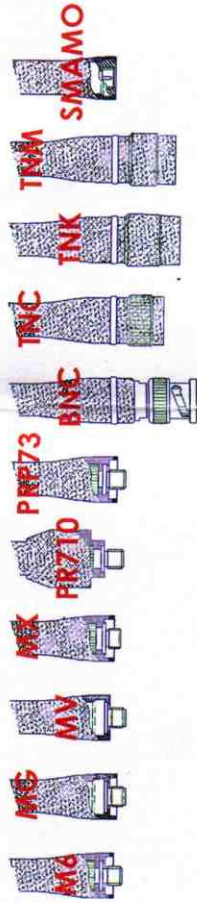
Panorama's portables are stocked pre-tuned according to the Bandplan™. For example, should you require antenna type MFX with a BNC connector to operate on 145MHz then the part number would be MFX-BNC-H4.

These pre-tuned portable antennas are colour coded for easy identification.

Panorama also offers portable antennas tuned to spot frequencies, or uncut.

★ Bandplan®	Colour Codes
E3 67-74 MHz	red
E4 74-81 MHz	yellow
E5 81-88 MHz	green
H4 141-151 MHz	yellow
H5 149-159 MHz	black
H6 156-162 MHz	orange
H7 162-174 MHz	white
JRC 139-157 MHz	red
K5 174-192 MHz	red
K6 192-208 MHz	green
K7 208-225 MHz	blue
L 220-250 MHz	black
M 245-275 MHz	orange
N 270-300 MHz	green
R 330-366 MHz	blue
S 350-392 MHz	yellow
S1 380-400 MHz	black
S2 410-430 MHz	white
T 390-432 MHz	red
U 430-472 MHz	green
UT 406-472 MHz	blue
W 470-512 MHz	white

Connector	As used by:	Panorama type
BNC	CLEARSTONE, ICOM, MAXON, NABISHI, PHILIPS, TRT, YAESU	MFX, MVQ, MXK, PXX
M6	ALCATEL	MFX, MXK
M6F	SIMOCO (PHILLIPS), STORNO	PFX
MX	KENWOOD, MAXON, MOTOROLA, TAIT	MFX, MVQ, MXK, PXX
MG	MOTOROLA (e.g. GP900)	MFX, MVQ, MXK, PXX
MV	SIMOCO (SRP8000 + TETRA)	MFX, MVQ, MXK, PXX
PR710 and PR73	SIMOCO	MFX, MXK
TNC	ALCATEL, ASCOM, BOSCH, ICOM, KENWOOD TRIO, NABISHI, SIMOCO	MFX, MVQ, MXK, PXX
TNK	GRUNDIG, KEY, KYODO	MFX, MVQ, MXK, PXX
TNA	KEY, KYODO, NIROS	MFX, MVQ, MXK, PXX
SMAMO	TAIT (ORCA)	MFX, MFXU, MQ, MXK, PXX



MXK (compressed helical)

This compressed design combines top performance and compact length. Available in Bandplan codes: E3, E4, E5. Bandwidth = 5% at 2:1 VSWR. Length = 195mm at 68MHz.

MFX (helical)

Our best selling VHF antenna for hand held radio equipment. Widely used by handset manufacturers. Available in Bandplan codes: H4 to N. Bandwidth = 5% at 2:1 VSWR. Length = 170mm at 146MHz. Shown here with BNC connection.

PXX (compressed helical)

A compressed version of the MFX for special applications where the antenna needs to be as short as possible. Available in Bandplan codes: H4 to K7. Bandwidth = 5% at 2:1 VSWR. Length = 87mm at 146MHz.

MVQ (quarterwave)

Available in Bandplan codes: H4 to L. Bandwidth = 10% at 2:1 VSWR. Length = 500mm at 146MHz. Shown here with TNC connection.

MFXU (helical)

Our best selling UHF antenna for hand held radio equipment. Available in Bandplan codes: R to W. Bandwidth = 8% at 2:1 VSWR. Length = 80mm at 450MHz.

MQ (quarterwave)

Available in Bandplan codes: R to UT. Bandwidth = 10% at 2:1 VSWR. Length = 165mm at 450MHz. Shown here with BNC connection.

The following products are suitable where high performance groundplane independent antennas are required. (Bandwidth = 10% at 2:1 VSWR)

PUG (halfwave)

Available for frequencies between 340 and 520MHz. Length = 340mm at 450MHz. Shown here with TNC connection.

PCG (halfwave)

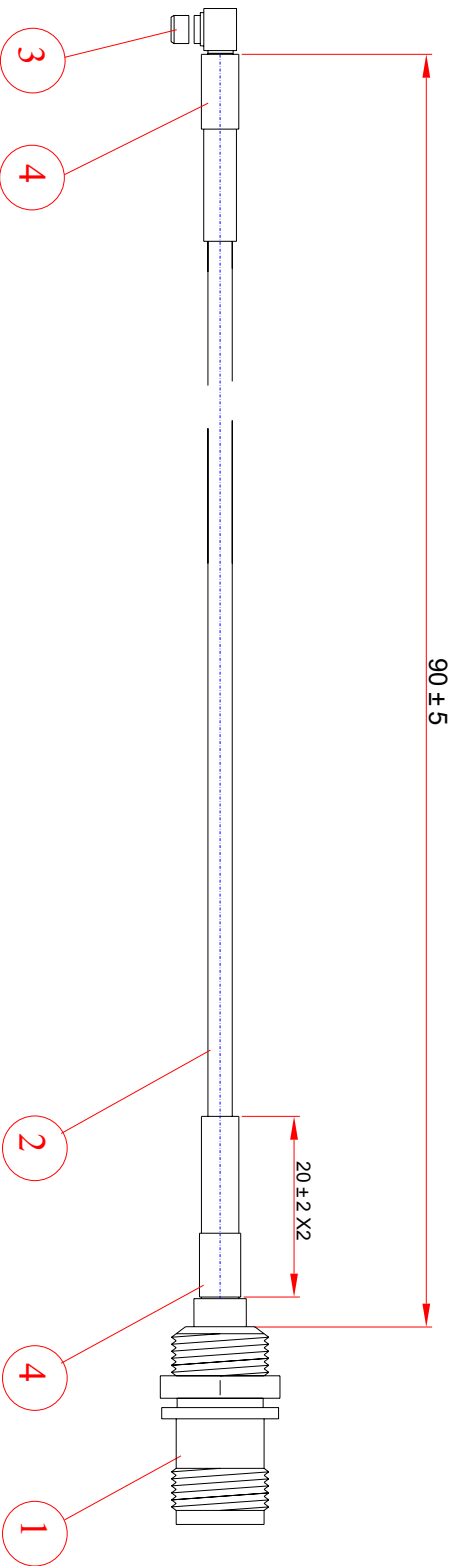
Available for the following frequencies: 800-860, 860-960 and 1250-1360 MHz. Length = 190mm at 920MHz. Shown here with TNC connection.

PCDE-TNC (dualband dipole)

This product is for 900 and 1800MHz dualband applications (220mm in length). Versions for 800MHz, 1900MHz, and 2.4GHz combinations are being developed.



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



NOTE:
HI-G-TEK Assy,P/N SA4602DS

HGT11694	CGPT-4.8/2.4	RAYCHEM	2	HEATSHRINK BLACK	4
HGT5165	J01340A0051	TELEGARTNER	1	MMCX RIGHT ANG. CRIMP	3
HGT5173	RG1749174	ALPHA	1	COAX CABLE RG174	2
HGT5196	56K504-802A4	ROSENBERG	1	TNC CRIMP JACK	1
HI-G-TEK P/N	MFQ. P/N	MFQ.	QTY	DESCRIPTION	NO.
UNLESS OTHERWISE SPECIFIED					
SIGNATURES		DATE			
DRAWN		6.1.02			
CHECKED					
APPROVE					
		 Hi-G-TEK 16 HUNTERSBOURNE ST GIR-VEILUDDA 60071 STRAHL, TEL. 072-3-138159 FAX 072-3-539622			
TITLE:					
OUTDOOR READER					
TNC RF CABLE ASSY					
MATERIAL		SIZE		DWG NO	
		B		47D40110	
FINISH		SCALE		REV	
				4A	
		SHEET		1 OF 1	