



Bushcomm HF Antennas



Product Catalogue 2009



Bushcomm BBA100 and 1kw antennas used in a Barret communications facility—Courtesy of Bob Blumfield



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SINGLE AND MULTI WIRE ANTENNA



SWC100
Single Wire Centrefed
(3MHz-30MHz)



SWE 100
Single wire Endfed (3-30MHz) with
accessories

Model	Description	Length
SWC100	Single Wire Centrefed (3MHz-30MHz)	48m
SWC100S	Single Wire Centrefed (3.5MHz-30MHz)	34m
SWE 100	Single Wire Endfed (3MHz - 30MHz)	24m
FD100	100W Folded Dipole (3Mhz-30MHz) (2 wire)	27m



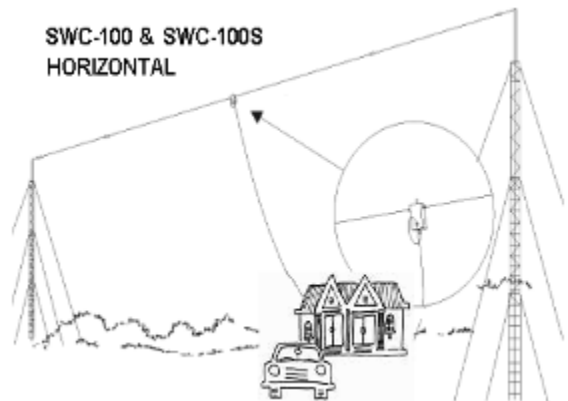
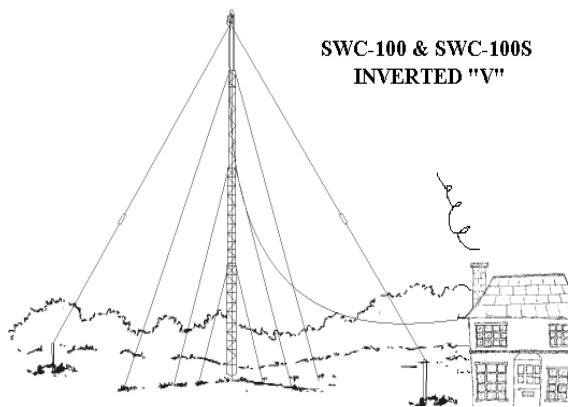
FD100
100W Folded Dipole (3MHz - 30MHz) (2 wire)

DIY KITS

KIT1 and KIT3 DIY Version of SWC – 100 and 100S (1 wire)



Model	Description	Length
KIT1	SWC 100S DIY kit	34m
KIT2	FD100 DIY kit	27m
KIT3	SWC 100 DIY kit	48m



KIT2 DIY Version of FD100 (2wire)

BUSHRANGER HFoZ VEHICLE WHIPS

Frequencies	Station	Tap
16240 16231 16104.5	RADTEL Ch 17 RADTEL Ch 19 RADTEL Ch 21	18
15968 15890.5	RADTEL Ch 25 HFoZ Ch 10	17
12216 12211.5	HFoZ Ch 9 RADTEL Ch 24	16
11450	RADTEL Ch 20	15
11016.5 11013.5	RADTEL Ch 16 RADTEL Ch 18	14
8160	RADTEL Ch 15	13
8083 8043	RADTEL Ch 23 HFoZ Ch 8	12
6965 6960 6950 6945	RFDS Mt Isa Secondary RFDS Port Hedland Secondary RFDS Alice Springs Secondary RFDS Derby Secondary	11
6920 6910 6890 6880	RFDS Broken Hill Secondary RADTEL Ch 14 RFDS Port Augusta Secondary RFDS Meekatharra Secondary	10
5744 5734	RADTEL Ch 22 HFoZ Ch 7	9
5410 5360	RFDS Alice Springs Primary RFDS Carnarvon Primary RFDS Kalgoorlie Primary RFDS Meekatharra Primary	8
5300	RFDS Port Hedland Primary RFDS Derby Primary	7
5110 5105	RFDS Mt Isa Primary RADTEL Ch 13	6
4980	RFDS Charleville Primary	5
4055 4045	RFDS Broken Hill Primary RFDS Carnarvon Secondary	4
4030 4010	RFDS Port Hedland Secondary RFDS Port Augusta Primary	3
3885	HFoZ Ch 6	2
3760	RADTEL Ch 12	1

Bushcomm's latest **Bushranger HFoZ** Vehicle whips are designed for consumers using the HFoZ network.

Machine wound, and coated in a new heavy duty Polyolefin coating these whips are strong, efficient and affordable.

On the left is the list of frequencies for which the Bushranger HFoZ is tuned. Selecting a frequency is as simple as plugging in a tap.

Full instructions and frequency list are included with all whips.

Other accessories available for the Bushranger series



BASE6
Heavy Duty
Chromed Brass
Base to suit



SPR5
Zinc plated spring

Bushcomm also has a range of 1.8m Custom Tapped Whip available in Epoxy (**BU00171**) or the new Polyolefin Heat shrink coating (**BU00401**)

BUSHRANGER VKS VEHICLE WHIPS

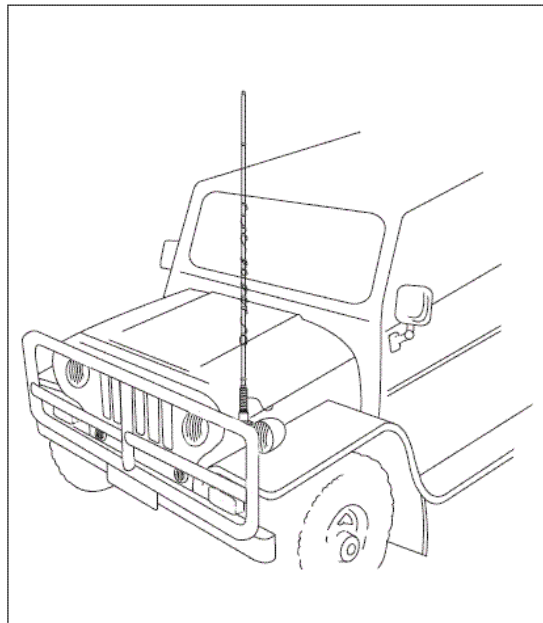
Freq	Station	Tap
14977	VKS 4	13
11612	VKS 3	12
10180	VKS 7	11
8022	VKS 2	10
6965 6960 6950 6945	RFDS Mt Isa Secondary RFDS Port Hedland Secondary RFDS Alice Springs Secondary RFDS Derby Secondary	9
6920 6890 6880	RFDS Broken Hill Secondary RFDS Port Augusta Secondary RFDS Meekatharra Secondary	8
6845 6825 6796	RFDS Charleville RFDS Kalgoorlie Secondary VKS 6	7
5455 5410	VKS 1 RFDS Alice Springs Primary	6
5360 5300	RFDS Carnarvon Primary RFDS Meekatharra Primary RFDS Kalgoorlie Primary RFDS Port Hedland Primary RFDS Derby Primary	5
5145 5110	RFDS Cairns Primary RFDS Mt Isa Primary	4
4980	RFDS Charleville Primary	3
4055 4045 4030	RFDS Broken Hill Primary RFDS Carnarvon Secondary RFDS Port Hedland Secondary	2
4010 3995	RFDS Port Augusta Primary VKS 5	1

Bushcomm's latest **Bushranger VKS** Vehicle whips are designed for customers using the VKS network.

Machine wound, and coated in a new heavy duty Polyolefin coating these whips are strong, efficient and affordable.

On the left is the list of frequencies for Bushranger VKS. Selecting a frequency is as simple as plugging in a tap.

Full instructions and frequency list are included with all whips.



AMATEUR WHIPS

TJ -11

UHF Mini Stinger whip 1.2m

TJ - 2

UHF Stinger whip 1.8m



The **UHF Stinger** (pictured above) is a pioneering mobile whip made principally for the mining sector. The Stinger is engineered for heavy-duty usage situations and in harsh conditions; it has the durability you would expect and that you have come to expect from any Bushcomm product.

The Fibreglass tubing at the core is double the wall thickness of the average material used and the structural integrity is further reinforced by the unique manufacturing process of thicker cloth wound at a different angle. Add to this a non-corrosive stainless steel base and it makes for one hard-wearing antenna.

The **Highlander 8** (pictured right) Vehicle whips are designed for Amateur enthusiasts looking for a dependable whip for a vehicle.

Machine wound, and coated in a new heavy duty Polyolefin coating these whips are strong, efficient and affordable.

The Highlander 8 is designed to cover the amateur bands shown below.

Selecting a band is as simple as plugging in a tap. Fine tuning within a band is performed by moving the variable length tip.

BU00253

Highlander 8

Bands (m)

10

11

12

15

17

20

30

40

80





PORTABLE ANTENNAS



PLW
Portable Broadband End Fed with Flexiweave wire (3-30Mhz)



BU000185
Portable Tactical Broadband Dipole with braided Kevlar wire (3-30MHz)

TJ-16
Firecracker
Emergency antenna with Flexiweave wire.



BU00184
Portable Tuned Dipole with braided Kevlar wire (3-30MHz)





Bushcomm
HF Antennas

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BU00012
Portable Elevation Kit
5m Tower, 5.5kg weight



Portable elevation kit rolls up and packs quickly for ease of transport

**All portable units
supplied with
Coax.**

PTEF

Portable Tuned End Fed (3-30MHz) (Flexiweave)



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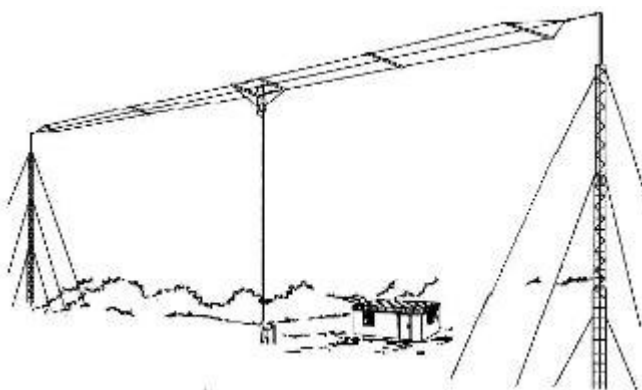
BBA SERIES ANTENNAS



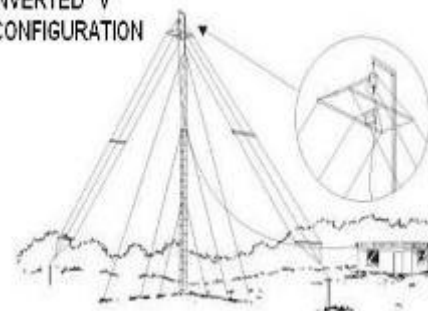
**Broadband Antennas
do not require Tuners!**

Available models

Model	Length	Power (Average)	Max VSWR	Freq Range
BBA-100CS	20m	100W	2:1	4.9 to 30MHz
BBA-100C	27m	100W	2:1	3.6 to 30MHz
BBA-100CE	54m	100W	2:1	1.8 to 30MHz
BBA-100CF	74m	100W	2:1	1.6 to 30MHz
BBA-600V	27m	600W voice, 250W avg	2:1	3.6 to 30MHz
BBA-600VE	54m	600W voice, 250W avg	2.5:1	1.8 to 30MHz
BBA-1kC	27m	1000W	2.5:1	3.6 to 30MHz
BBA-1kCE	54m	1000W	2.5:1	1.8 to 30MHz
BBA-1kCF	74m	1000W	2.5:1	1.6 to 30MHz
BBA-1kD	27m	1000W	2:1	3.6 to 30MHz
BBA-1kDE	54m	1000W	2:1	1.8 to 30MHz



INVERTED "V"
CONFIGURATION



VERTICAL ANTENNA



VA-71**
 Vertical antenna 7.1m



VA-3 (VA-3W*)
 High performance 3
 band Vertical

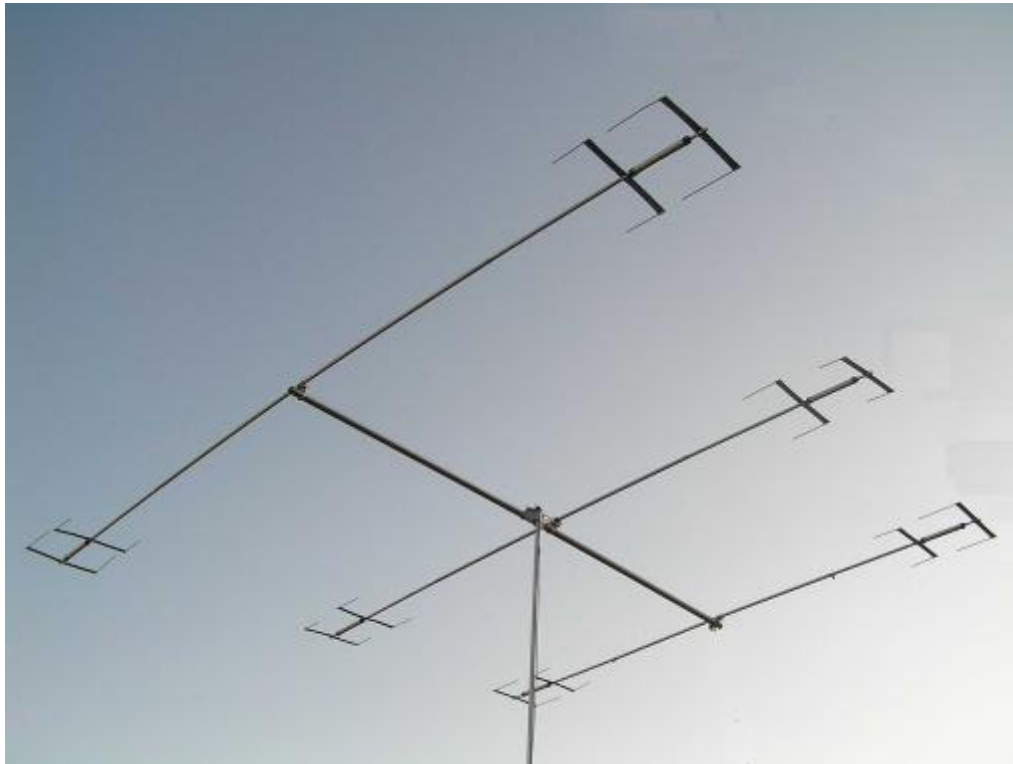


VA-4
 High performance 4 Band vertical

Model	Frequency (MHz)	Wave length (m)	Height (m)
VA - 3	14, 21 and 28	25, 15 and 10	5.1
VA - 4	7, 14,21 and 28	40, 20, 15 and 10	10.7

* VA-3W fitted for WARC bands
 ** 2-30 MHz with typical tuner

High Performance 3 Element Beam - 4m



New high efficiency traps, all stainless steel hardware and rugged aluminium construction guarantee long and trouble-free operation.

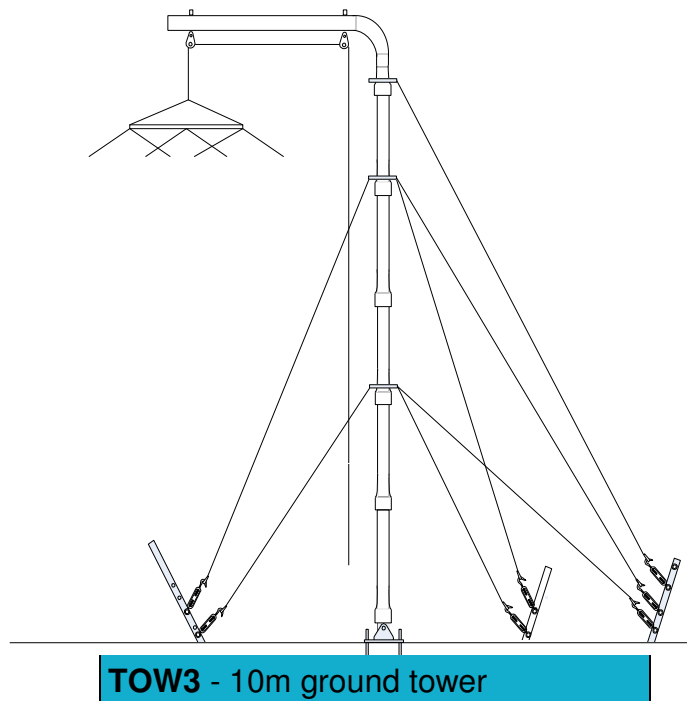
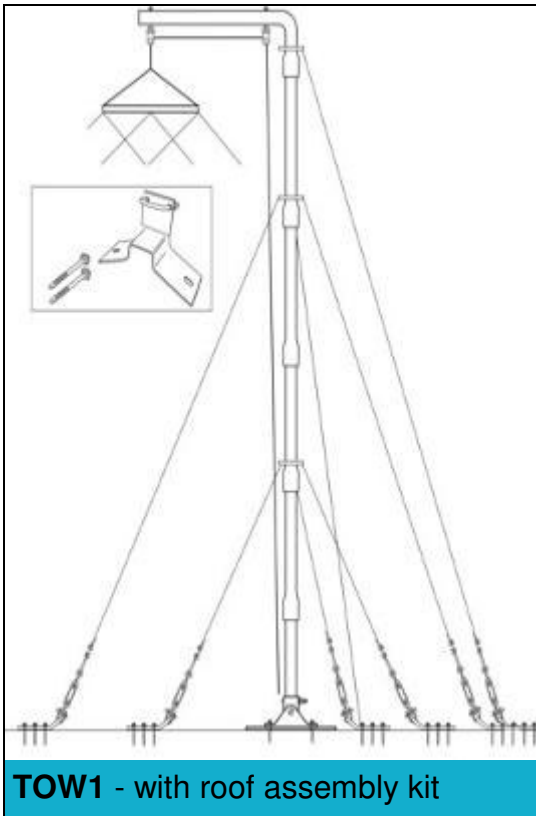
The antenna is made from specially hardened aluminium, all predrilled and by following the instructions, you will find that the antenna is simple to assemble.

FREQUENCY	14, 21, 28 MHz band
MAX.ELEMENT LENGTH	5520 mm
BOOM LENGTH	4.0 m
GAIN	6 / 6 / 7 dBi
FRONT TO BACK RATIO	20/ 15/ 14 dB
FEED IMPEDANCE	50 OHM
TURNING RADIUS	3.74 m
WEIGHT	12 kg
POWER RATING	2 kW PEP

Light Weight Towers



Product code	Description
TOW1	10m Roof mounted assembly
TOW2	10m Ground Mounted assembly with rope guides
TOW3	10m Ground Mount Tower with wire guides
TOW4	12m Tower with wire guides

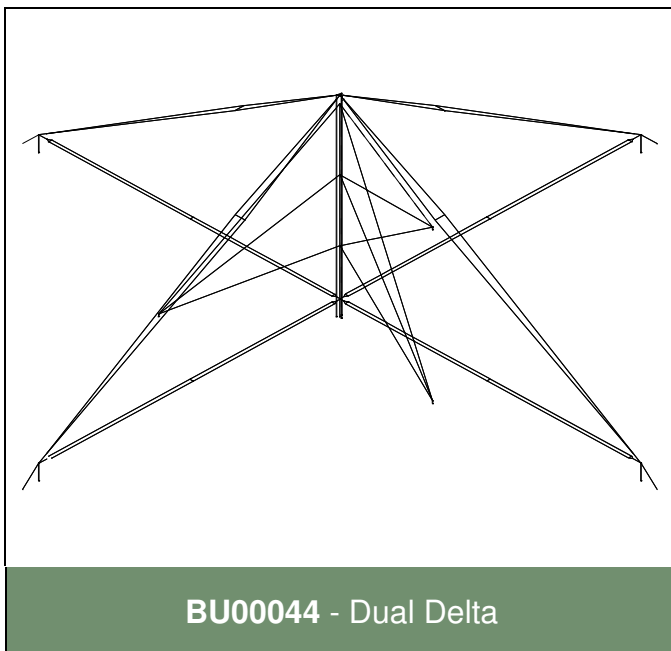


Dual Delta Broadband Antenna

The Bushcomm Dual Delta is a medium to high angle omnidirectional antenna for HF communications using ionospheric propagation over short to medium distances. The Dual Delta antenna comprises sloping elements and horizontal elements. There are 4 of each around the central mast. The Dual Delta feed arrangement offers low VSWR broadband operation without the use of a resistive terminating load, ensuring optimum efficiency. The feed balun, mounted at the base of the antenna, matches the antenna feedpoint to 50 ohm coaxial feedline. The balun and antenna are rated for transmit power of 1000w continuous.

Electrical Specifications

Frequency Range	2-30MHz
Maximum transmit power	1kw continuous
VSWR	2.6:1 or better
Input impedance	50 ohm
Azimuth radiation pattern	Omni directional
Elevation radiation pattern	high angle
Balun	1kw average power, terminated in PL259 socket.
Feed line (recommended)	RG213 coax, PL259 plugs



Mechanical Specification

Central mast height	25m
Stub mast height	2m
Footprint	76m x 76m square
Sloping element length	45m
Horizontal element length	37m



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Parts and Accessories



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Coax Cable



BNC connector



UHF Connector

Code	Description	Length	Connectors
CX2	RG58 Coaxial	5m	BNC/UHF
CX4	RG58 Coaxial	5m	UHF
CX8	RG213 Coaxial	30m	UHF
BU00415	RG58 Coaxial	30m	UHF, black
BU00416	RG58 Coaxial	10m	UHF, black
BU00422	RG58 Coaxial	10m	BNC/UHF, black
BU00542	RG213 Coaxial	30m	UHF-N





BAL5
4:1 Balun to suit VA71
& minibeam antennas.

(Includes Bracket set)

Allows Coax feed from
Tuner to base of the
antenna



BASE6
Heavy Duty
Chromed Brass
Base to suit spring

BASE8
Delrin
Base to
suit spring



SPR5
Zinc
plated
spring



SPR3
Standard
Delrin Base
and Spring



PTS
Pig Tail strain relief for Multiwire





WHC-1

Stainless Steel Whip top to suit Codan Auto tuner



STBK

Stand off Bracket to suit Multiwire series



BU00156
Heavy Duty
Spring and base

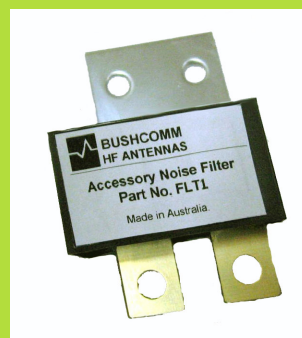
BSA-150

Surge (lightning) Arrestor
150 watt



FLT1

Noise Filter





Who is Bushcomm?

Bushcomm specialises in the manufacture of high frequency (HF) antennas. We have a wide selection of antennas, ranging from multi-wire and single-wire base station antennas to portable antenna models.

Established in South Australia in 1990 and now headquartered in Perth, Western Australia, we have built up a global client base through products known for quality and reliability in the world's harshest environments.

Our products are highly effective, and made from the best quality components. They have proven to be durable in all varieties of extreme conditions: from cyclonic tropical areas in Papua New Guinea, to the deserts of central Australia, to the sub-zero temperatures of the Antarctic.

Bushcomm addresses all sectors where basic communication infrastructure is not available: military, mining, government, humanitarian aid, rescue, forestry and police Services. We also professional communications organisations and HF amateurs.

In the tactical HF market, our portable antennas meet all critical requirements from quick deployment to reliable, uncompromising performance.



Adaptive and innovative

Although HF is considered a mature technology, we at Bushcomm constantly strive to improve our products and processes to increase the quality on which the company was built. Bushcomm has a strong commitment to research and developing new products and improvements for the radio communications market. Our products are always being reviewed and refined; our company is constantly evolving.

With new production processes, we are able to accommodate custom orders and special requirements.



Our Guarantee

Every Bushcomm product is made with care from quality materials to ensure the highest possible quality end product. With exhaustive testing at every stage, you can be assured of a long lasting reliable product. We stand by our products and we will do our utmost to ensure customer satisfaction.