

## B65 Series Sidemount Dipoles

Flange or mast mount sidemount dipoles

UHF 600-820 MHz

These sidemount dipoles provide genuine broadband coverage in the UHF frequency range 600 to 820 MHz. Traditionally folded dipoles are mounted so as to use the mast or tower as a reflector. Pattern formation and gain can be varied by altering dipole to mast spacing, or by mounting in stack array formations.

Mounting hardware, coaxial feeder cables, connectors and other installation accessories are all available separately.

	B65-SS	B65F
Construction	Fully-welded 304 grade stainless steel dipole and frame	Fully-welded 304 grade stainless steel component and PVC flange mount
Frequency range	600-820 MHz - UHF	
Bandwidth	Full frequency range stated above - 220 MHz	
Tuning	Factory	
VSWR	<1.5:1	
Gain	0 dBd for a single bay, stacking increases gain	
Maximum power	25 Watts	
Impedance - nominal	50 Ohms	
E and H Plane	Varies according to the mounting arrangement	
Polarisation	Mount horizontal or vertical as required	
DC grounding	Yes	
Cable	600mm MIL-SPEC RG58 A/U - bottom exits mount section	
Connector	N-type female fitted as standard or specify requirements	
Dipole height	190mm	
Stand-off	25mm x 300mm	
Weight	420grams	430grams
Wind load at 160kph	1.103kg, 0.011kN	1.103kg, 0.011kN
Mounting B65 order separate	Parallel: 1 x EB1-SS or 1 x UB3-SS Right-angle 1 x RB8/RB8-L 1 x UB2-SS	
Mounting B65F	PVC flange fitted to base, mount using 2 screws or bolts	
Mounting position recommended	Mount as high as possible on your structure, mast or tower using the appropriate bracket or flange mount	



B65SS and cable exit from base



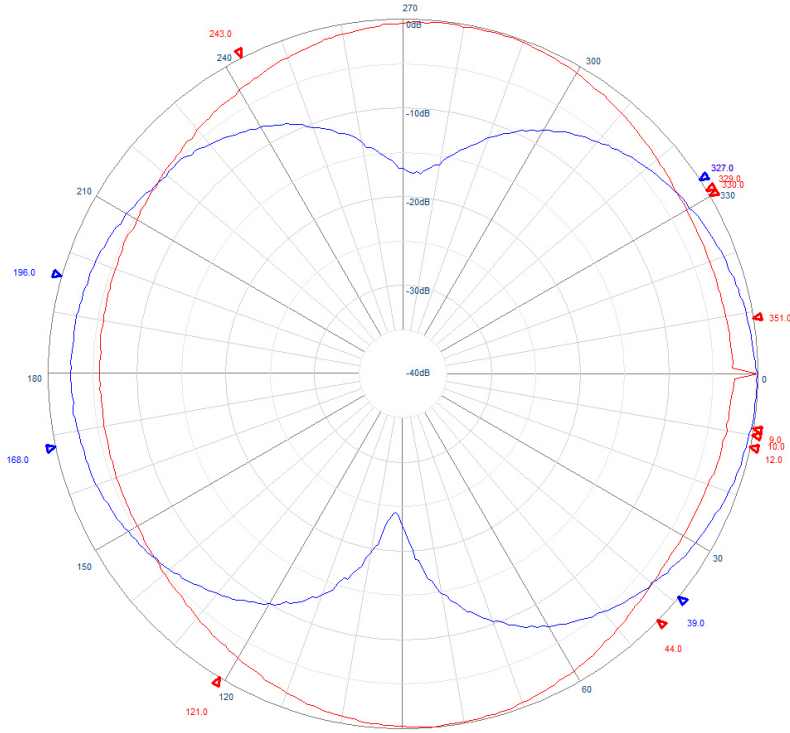
B65F with flange mount and cable exit from base and side of flange mount



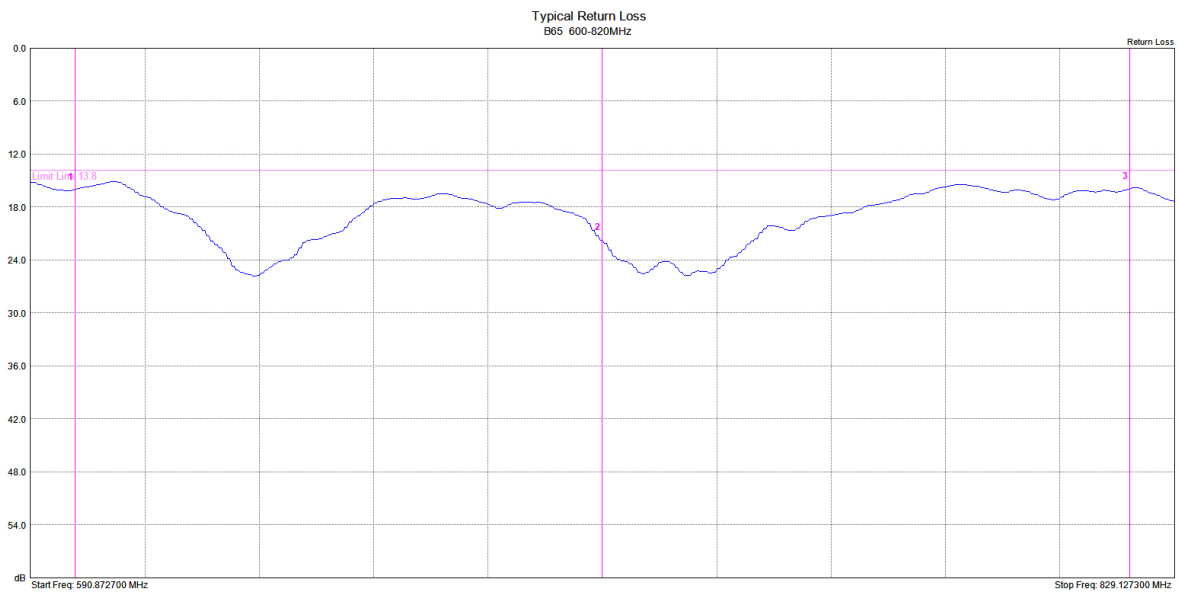
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Example radiation pattern



Mirr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	600.000 MHz	16.07 dB	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	710.000 MHz	21.78 dB	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	820.000 MHz	15.94 dB	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

Typical Return Loss





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### Mechanical Data

Height of array	Subject to configuration
Total net weight	Refer to table
Wind Load	Refer to table
Mounting hardware	One clamp per dipole - order separate

### Technical Data

Configuration	Off-set	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 dipole	0.9 λ	0	0.42 / 0.43	0.19	0.011
2 dipoles		3.0	0.84 / 0.86	0.57	0.022
4 dipoles		7.5	1.68 / 1.72	1.33	0.044
6 dipoles		9.8	2.52 / 2.58	2.09	0.066
8 dipoles		11.0	3.36 / 3.44	2.85	0.088

- Gain: referred to half wave dipole, losses of power through cable or power dividers not included
- Weight: does not include mounting hardware, power dividers/phasing harness, brach feeder coaxial cables or mount poles
- Wind load: V = 160km/h
- Height: calculated at centre frequency of frequency range, alterations should be account for when using alternate frequencies



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### Suitable mounting hardware



**EB1-SS** - requires 2  
304 stainless steel parallel  
clamp  
Boom: 20-40mm capability  
Mount pole: 25-45mm  
capability



**UB3-SS**  
304 stainless steel parallel  
clamp  
Boom: 20-32mm capability  
Mount pole: 20-50mm  
capability




**RB8**  
Galvanised steel right-angle  
clamp  
Boom: 20-50mm capability  
Mount pole: 20-50mm  
capability



**UB2-SS**  
304 stainless steel right-angle  
clamp  
Boom: 20-50mm capability  
Mount pole: 20-50mm  
capability



**CFB series** - Galvanised steel 'J'  
hockey stick brackets, 1.1 - 2.1  
metres.  
  
Requires mounting screws/  
bolts and mounting hardware  
for antenna



**SFB Series** - galvanised steel  
pole extension 0.9-2.0 metres  
Roof or overhang mounting  
  
Requires mounting screws/  
bolts and mounting hardware  
for antenna

### Suitable feeder coaxial cable and connectors




**RU400** Solid copper conductor,  
low loss coaxial cable  
CNT-400 / LMR-400™ equivalent  
(\* times microwave)  
P/N 7890  
Available in 100m, 300m, 500m  
roll or alternatively request a  
custom cable assembly



N-type male crimp connector  
for RU400 low loss, solid  
conductor  
  
P/N 8226  
  
Tri-metal plated



**RU600** Solid copper conductor,  
low loss coaxial cable  
LMR-600™ equivalent  
(\* times microwave)  
P/N 7890-2  
Available in 500m roll or  
alternatively request a custom  
cable assembly



N-type male crimp connector  
for RU600 low loss, solid  
conductor  
  
P/N 8226-2  
  
Tri-metal plated



1/2" super flexible helical  
shielded, foam dielectric  
coaxial cable  
P/N ZCG1250SF  
  
Available in per metre, 500m  
roll or alternatively request a  
custom cable assembly



N-type male clamp connector  
for 1/2" super flexible, helical  
shielded coaxial cable  
  
P/N NM1250SF  
  
Tri-metal plated