

## **Welcome to the NEW Force 12 XR Series of Multi-Monoband Beams for 2014!**



Our famous XR and C Series Compact Multi-Monoband Yagis have long set the performance standard for single feedline, multiband Yagis. The entire line has been upgraded and is **available NOW!**

The all-new XR3, XR4, XR5-S, XR5-T and XR6 (including the "-C" even more compact versions) Multi-Monoband Yagis supersede our much loved but now 'retired' C-3, C-3E, C-3SS, C-19XR, 4BA and XR-5 models. Gain and bandwidth as a factor of boom length and mechanical integrity are all improved, plus we've added 6 meters to the band lineup while shortening the booms! *Your new rig has 50 MHz so your new multiband antenna should too!* What hasn't changed is our great value - we use our two company / two continent buying power to hold the line on prices.



**XR6: 12-Foot Boom, 11 Elements, 6 Bands,  
One Feedline!**

**New Features and Benefits** We've taken the legacy C- and XR- series designs and completely reworked them to provide better performance across the board. InnovAntennas founder Justin Johnson, G0KSC has utilized his creative design skill to lay out the elements in a more efficient manner, resulting in better bandwidth and pattern. Force 12's rivet based construction has been retained and enhanced, while high-quality Stauff insulating clamps now are used to support the elements. High tensile strength (<40,000 PSI ultimate) drawn aluminum tubing (6061-T6 and 6063-T832 alloys) and SAE 304 stainless steel hardware are now standard, and our robust 2" (0.12" wall) boom does not require overhead truss support.

**More BOOM From Less Boom!** These new XR Series designs generate comparable gain to the models they replace but with shorter booms (approximately 30% shorter in the case of the new XR3 compared to the old C-3) and are native 50 Ohms and thus require no failure-prone, pattern-distorting matching devices of any kind (and they also don't have power and bandwidth robbing traps or failure-prone stepper motors). Just hook up your coax (via a 1:1 balun, of course) and go!

**Engineered To Professional Standards.** Structurally, the new XR Series has been elevated to a new tier of strength and integrity. Mechanical engineer Kurt Andress, K7NV, well known in antenna circles for his YagiStress (YS) software - the gold standard for perfecting Yagi mechanical designs - has collaborated with our own Justin Johnson, G0KSC to create an antenna line that excels in both the electromagnetic and mechanical realms and exceeds the new ANSI/TIA-222-G 100 mph standards when the is antenna installed 70 feet above Exposure C terrain. When comparing our antennas with 'Brand X' note whether those products are rated to 'Rev. G' standards or are still rated to obsolete Rev. F or even earlier standards.

**Stable, Broadband Designs.** With our stable, broadband designs you *never* have to decide whether you want a "CW beam" or a "Phone beam" nor do you have to endlessly take your antenna up and down the tower tweaking element tips to achieve a just-barely-rig-acceptable VSWR match from an antenna whose 'real world' performance doesn't live up to its marketing claims.

**Balanced Designs.** All XR Series antennas have been wind *and* weight balanced to minimize rotator and tower system stress. We build our antennas to last and also not place unnecessary demands on the rest of your installation. If extreme weather at your QTH demands extreme strength please contact us to discuss options; we will be happy to custom design an Ultra HD system to your exact wind and ice load environment.

**Force 12 - [www.Force12inc.com](http://www.Force12inc.com) - (888) 998-8541 x103 - [sales@force12inc.com](mailto:sales@force12inc.com)**

## XR Series Performance Characteristics

### XR3 (20/15/10m)

Gain (FS)	F/B	SWR	Boom Length	Weight	Turning Rad.
20m: 6.1 dBi	20m: 10.76 dB	<1.5:1 over 14.00-14.35 MHz	10.2' (3.1m)	22 lb (20 kg)	18.7' (5.7m)
15m: 6.2 dBi	15m: 12.76 dB	<1.9:1 over 21.00-21.45 MHz			
10m: 6.78 dBi	10m: 21.78 dB	<1.5:1 over 28.00-28.60 MHz			

### XR4 (20/15/10/6m)

Gain (FS)	F/B	SWR	Boom Length	Weight	Turning Rad.
20m: 6.1 dBi	20m: 10.6 dB	<1.5:1 over 14.00-14.35 MHz	11.5' (3.5m)	54.2 lb (24.6 kg)	19.6' (5.98m)
15m: 6.2 dBi	15m: 12.68 dB	<1.9:1 over 21.00-21.45 MHz			
10m: 6.78 dBi	10m: 22.27 dB	<1.5:1 over 28.00-28.55 MHz			
6m: 7.55 dBi	6m: 25.27 dB	<1.2:1 over 50.0-50.3 MHz			

### XR5-T (20/17/15/12/10m)

Gain (FS)	F/B	SWR	Boom Length	Weight	Turning Rad.
20m: 6.05 dBi	20m: 10.71 dB	<1.4:1 over 14.00-14.35 MHz	11.8' (3.6m)	63.3 lb (28.7 kg)	19.65' (5.99m)
17m: 6.33 dBi	17m: 13.23 dB	<2.0:1 over 18.068- 18.168 MHz			
15m: 6.33 dBi	15m: 13.23 dB	<2.0:1 over 21.00-21.35 MHz			
12m: 5.52 dBi	12m: 10.0 dB	<1.3:1 over 24.89-24.99 MHz			
10m: 6.78 dBi	10m: 22.27 dB	<1.5:1 over 28.0-28.55 MHz			

### XR5-S (17/15/12/10/6m)

Gain (FS)	F/B	SWR	Boom Length	Weight	Turning Rad.
17m: 6.33 dBi	17m: 13.23 dB	<2.0:1 over 18.068- 18.168 MHz	11.8' (3.6m)	63.3 lb (28.7 kg)	19.65' (5.99m)
15m: 6.33 dBi	15m: 13.23 dB	<2.0:1 over 21.00-21.35 MHz			
12m: 5.52 dBi	12m: 10.0 dB	<1.3:1 over 24.89-24.99 MHz			
10m: 6.78 dBi	10m: 22.27 dB	<1.5:1 over 28.0-28.55 MHz			
6m: 7.55 dBi	6m: 25.27 dB	<1.2:1 over 50.0-50.3 MHz			

### XR6 (20/17/15/12/10/6m)

Gain (FS)	F/B	SWR	Boom Length	Weight	Turning Rad.
20m: 6.05 dBi	20m: 10.71 dB	<1.4:1 over 14.00-14.35 MHz	11.8' (3.6m)	63.3 lb. (28.7 kg)	19.65' (5.99m)
17m: 6.33 dBi	17m: 13.23 dB	<2.0:1 over 18.068- 18.168 MHz			
15m: 6.33 dBi	15m: 13.23 dB	<2.0:1 over 21.00-21.35 MHz			
12m: 5.52 dBi	12m: 10.0 dB	<1.3:1 over 24.89-24.99 MHz			
10m: 6.78 dBi	10m: 22.27 dB	<1.5:1 over 28.0-28.55 MHz			
6m: 7.55 dBi	6m: 25.27 dB	<1.2:1 over 50.0-50.3 MHz			

**The entire Force 12 antenna and tower line is being upgraded during 2014. Check [www.force12inc.com](http://www.force12inc.com) and [www.InnovAntennas.us](http://www.InnovAntennas.us) often. Ask us about 403A Signature Line and AlfaSpid Rotators, too!**