

## 7el 144-145MHz Yagi OWL-Ultra Super low noise Yagi



7el OWL Ultra - 144-145MHz for super low noise Yagi for weak signal operation

Rating: Not Rated Yet

### Price

Sales price £154.95

Sales price without tax £129.13

[Ask a question about this product](#)

Manufacturer [InnovAntennas](#)

### Description

**A 7 element OWL-Ultra (3.1m long) Super low noise, light weight Yagi 144-145MHz Optimised for weak signal (EME) operation - New 2020 Model!**

**X-pol available upon request & full EME system prices available upon request - This email address is being protected from spambots. You need JavaScript enabled to view it. `document.getElementById('cloakb6d5020005703946dad5155260cb66b0').innerHTML = ''`; var prefix = 'ma' + 'il' + 'to'; var path = 'hr' + 'ef' + '='; var addyb6d5020005703946dad5155260cb66b0 = 'sales' + '@'; addyb6d5020005703946dad5155260cb66b0 = addyb6d5020005703946dad5155260cb66b0 + 'innovantennas' + '.' + 'com?subject=9el%20OWL%20Ultra%20EME%20or%20X-pol%20pricing'; var addy\_textb6d5020005703946dad5155260cb66b0 = 'Email us for pricing'; document.getElementById('cloakb6d5020005703946dad5155260cb66b0').innerHTML += '+addy\_textb6d5020005703946dad5155260cb66b0+';**



**A 7el 144MHz OWL Ultra installed and ready for action**

**Fully customisable design - what you want, we will make**

If you require a **larger diameter boom**, rear mount, **X-pol**, a variation in frequency coverage or other variation, contact This email address is being protected from spambots. You need JavaScript enabled to view it.  
 document.getElementById('cloak8a2b07244c758ff12215bcc924b80b81').innerHTML = ''; var prefix = 'ma' + 'il' + 'to'; var path = 'hr' + 'ef' + '='; var addy8a2b07244c758ff12215bcc924b80b81 = 'sales' + '@'; addy8a2b07244c758ff12215bcc924b80b81 = addy8a2b07244c758ff12215bcc924b80b81 + 'innovantennas' + '.' + 'com'; var addy\_text8a2b07244c758ff12215bcc924b80b81 = 'sales' + '@' + 'innovantennas' + '.' + 'com'; document.getElementById('cloak8a2b07244c758ff12215bcc924b80b81').innerHTML += '+add\_y\_text8a2b07244c758ff12215bcc924b80b81+'; [detailing your requirement for a custom quote.](#)

**The very latest G0KSC desgins**

The G0KSC OWL Ultra is another fantastic design by G0KSC. A low impedance Yagi provides excellent performance. However, traditionally, low impedance has meant narrow bandwidth.

G0KSC developed the OWL (Optimised **Wideband Low impedance Yagi**) with a folded dipole driven element which this has increased the feed point from 12.5? impedance to 50?. This along with careful, long duration computer optimisation has resulted in a much wider bandwidth than previously seen in native low impedance Yagis.

**THE Low Noise Yagi dubbed the 'Urban Yagi'**

The super low noise characteristics of the OWL Ultra mean you can HEAR as well as be heard in today's modern and very noisy city environments. If you want the very best option for minimal nosie pick-up in Urban and city locations, the OWL Ultra is for you.

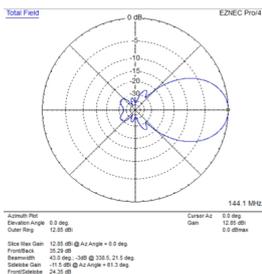
**Best in Class performance in terms of G/T**

All of the InnovAntennas OWL and LFA models for 2020 show better G/T (Gain over Temperature, an antennas ability to recieve weak signals) than any traditional dipole fed Yagi of the same or smaller size. Check the VE7BQH list for confirmation.

31	1-OC7YBU 7	1.46	10.59	2.88	2.47	16.95	4.5	104.0	-8.75	23.2	17.4	none	47.2	1.70	1	Blind Dipole
32	7EL 7 FD	1.45	10.56	2.83	2.46	16.97	4.2	103.7	-8.95	23.6	17.9	none	47.9	1.64	1	Parole Dipole
33	7EL 7 FD	1.46	10.85	2.97	2.62	16.82	3.8	115.4	-8.92	22.4	14.8	none	47.7	1.26	1	Parole Dipole
34	7EL 7 FD	1.46	10.86	2.96	2.61	16.81	3.8	108.4	-8.81	22.4	14.8	none	47.7	1.26	1	Parole Dipole
37	7EL 7 FD	1.50	10.76	2.89	2.53	16.99	7.9	109.6	-8.41	23.3	17.9	none	50.7	2.31	1	Dipole
38	7EL 7 FD	1.51	10.80	2.71	2.88	16.77	3.8	114.8	-8.41	23.2	18.9	none	50.4	2.28	1	LFA Loop
39	7EL 7 FD	1.51	10.82	2.86	2.50	16.70	2.8	120.3	-8.35	23.3	18.4	20.0	28.0	1.62	1	Dipole
40	7EL 7 FD	1.57	11.11	3.16	2.84	17.33	3.8	126.5	-8.41	18.9	11.9	18.0	28.4	2.04	1	Dipole
41	7EL 7 FD	1.62	10.81	2.84	2.46	16.88	2.0	100.8	-8.18	22.0	19.7	22.1	48.1	1.15	1	Dipole
42	7EL 7 FD	1.63	11.11	3.16	2.77	17.44	4.8	120.4	-8.20	17.8	11.9	17.7	18.5	2.27	1	Dipole

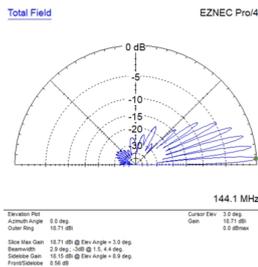
Note: the more positive the number in the blue column (G/T), the better the antennas G/T performance (ability to receive weak signals). Note the large gap in G/T between the 7el OWL Ultra and all Yagis either side of it. Exert from VE7BQH list of 6th December 2019, unedited.

**Polar plots of a single 7el OWL Ultra in free space and 10m above ground (free space)**





Above, Azimuth and elevation plots of a single 7el OWL Ultra on 144.1MHz. Note how tight the rear lobes are. Below elevation plot @ 10m above ground with ground reflections and ground gain.



**Above - 7el OWL Ultra 10m above ground**

## Excellent wet weather performance

The OWL Ultra is usable in all weathers. Unlike some antennas that shift frequency and become unusable when wet, the OWL Ultra remains perfectly usable.

## Latest and best G0KSC designs only available through InnovAntennas

The OWL-Ultra is the latest, 3rd generation OWL and provides G/T performance not seen at this boom length previously (VE7BQH independent comparison list). **The latest G0KSC designs are ONLY available through InnovAntennas.**

## Elevation lobe suppression is key

One of the reasons the OWL Ultra performance is better than other Yagis of the same size is the special attention paid to elevation lobes during the optimisation process. Whether you believe you live in a quiet location or not, elevation lobes will ensure your received noise floor is higher than it would otherwise be if they were greatly suppressed. Even if you have a shack in the middle of open countryside, if your shack is directly below the antenna or in view of the antenna in certain directions, noise from everything in the shack (from computers, modems, LED lamps, alarms WiFi adapters etc.) will increase your noise floor. The highly suppressed elevation lobes of the OWL Ultra will ensure your noise floor is as low as possible.

## Mechanical design

The new OWL Ultra is designed in a light weight and very strong package with this particular model using a **3/4" square boom** with through boom (insulated) **1/4" solid rod elements**. The driven loop is adjustable in order to ensure absolute minimum return loss figures can be seen and is made from **1/2" tube with 3/8" diameter loop ends** which trombone to provide the finalisation tuning ability. The folded dipole is through the boom as are the parasitic elements although the section of loop opposite the feed point is grounded to help reduce noise and to help protect the receiver front-end against static. Grounding the loop in this way also provides a band pass filter characteristic. The feed impedance goes very high quickly once moving away from the 2m ham band and this results in a filter property being added to the antenna for out-of-band signals, received or transmitted.

## G0KSC variable element correction applied

SWR characteristics are unparalleled as a result of the applying of G0KSC variable, percentage based correction to all through boom elements. Fixed length element correction does not match software models precisely. The correct method is to apply a % to the elements which vary greatly between the first (reflector) and last (final director) elements. However, an added complication is that the first and last few elements at either end of the boom, require less correction than those centrally mounted on the boom. Don't worry, all these correction issues are taken care of by G0KSC during the design and testing process.

## Other benefits include:

- Marine grade stainless steel fittings
- Super-light but rigid construction

## 7el OWL Ultra 144MHz EME Yagi & Weak signal

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- Mill finished boom and elements for highest levels of accuracy
- Unparalleled after-sales support and assistance when needed

For more information [Email Here](#)

### Performance

**Gain:** 12.85dBi @ 144.3MHz

**F/B:** 35.29dB @ 144.3MHz

**Peak Gain:** 12.89dBi

**Gain 10m above ground:** 18.71dBi

**Peak F/B:** 36.1dB

**Power Rating:** 5kw

**SWR:** Below 1.2:1 from 143.8MHz to 145.2MHz

**Boom Length:** 3.1m

**Weight:** 1.7kg/3.7lbs

**Safe Wind Speed:** 160Kph/100Mph+

**Turning Radius:** 1.763m/3.88ft

**Vertical Stacking:** Between 1.8m and 2.4m for minimum under-lobes

Units in box: 1