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South Midlands Communications

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NL Series NL8 NL9 NL10 NL12 NL16 NL22

The NL Series of telescopic Hilomasts has a base section diameter of 127mm and is pneumatically operated by air compressor. The shorter models in this series can be easily operated by a manual foot pump. Being heavier than the NK Series it will support larger antennas under more adverse weather conditions. Although these masts can be used for portable applications they are primarily designed for vehicle installation, either bracketed to the rear, or mounted through a roof bearing. Models NL16 and NL22 can be mounted onto the roof of a vehicle in a sliding carriage. Masts NL8, NL12 and NL22 have a top section diameter of 50mm for attaching antennas. Masts NL9, NL10 and NL16 have a top spigot of 50mm diameter x 130mm long. A popular use for this range on a vehicle installation is with our HiloCAM kit.

Mast	Height Extended	Height retracted	Number of Sections	Diameter of Top Section	Vertical Head Load	Max Wind Speed Unguyed	Max. Wind Speed with Top Guys	Top Guy Ref. No. inc. Stakes	Basic Weight of Mast
	metres	metres		mm	kgs	kph	kph		kgs
NL8	7.9	1.77	7	50	25	140	140	NUG/2GS	34
NL8NLC	7.5	1.77	7	50	25	140			34
NL9	8.8	2.44	5	76	35	130	130	NUG/6GS	37
NL9NLC	8.5	2.7	5	76	35	130			37
NL10	10.5	2.5	6	63	27	110	120	NUG/5GS	41
NL10NLC	10.2	2.3	6	63	27	110			41
NL12	12.2	2.43	7	50	25	95	110	NUG/4GS	46
NL12NLC	11.9	2.4	7	50	25	95			46
NL16	15.6	4.15	5	76	23	78	102	NUG/6GS	61
NL16NLC	15.6	4	5	76	23	78			61
NL22	21.7	4.15	7	50	14	56	92	NUG/8GS	74
NL22NLC	21.7	4.1	7	50	14	56			74

The table shows the vertical head load that each mast will support and the maximum operational wind speed. The weight of the antenna, however, is not usually the main criterion when selecting a mast. The limiting factor is usually the 'side surface area' of the antenna. The wind speeds shown are based on the following side surface areas: NL Masts = 2000 sq. cms.

Mast Mounting Options

Vehicle Fitment

For mounting masts through the roof of a vehicle or shelter. The assembly comprises an upper and lower aluminium bearing. The upper has three separate components, a flange fitted with a Teflon ring that is bolted to the outer skin of the vehicle, a tapping plate and a weatherproof shield that clamps to the mast. The lower bearing base plate has a Teflon disc to permit easy rotation of mast and a thumb screw for locking it in position. NRB/127



Mounting Brackets

For mounting masts to the vertical surface of a vehicle or building the kit comprises two brackets. The aluminium top bracket has one half detachable to allow for removal of the mast without disturbing the bracket fixings. It incorporates Teflon bearing rings to protect the mast. The lower bracket has a Teflon disc to permit easy rotation of the mast and a thumb screw for locking it in any desired azimuth position. NSM/127



Four Leg Stand

This four legged stand is for field erection of NL Series masts. Constructed from aluminium alloy it has adjustable legs for irregular ground conditions. These fold into the mast for transit. Ground pegs are supplied for anchoring the feet and base plate. The top bearing and base plate permit the rotation of the mast and a thumbscrew locks it in any desired azimuth direction. Weight 12 kgs. N4L/102



Typical Applications

- Large Antennas
- Vehicle Installations
- HiloCAM kit
- Meteo Measuring Equipment

Rapid Deployment Unit

Our RDU is a very practical method of fitting your Hilomast to a mobile unit without making it a permanent feature. The RDU can be easily assembled and fits all vehicles. Built to MIL SPEC 810.E standards it offers a robust base for your telescopic mast. The vehicle weight holds the foot of the base in place; in addition, larger models can be mounted to the roof rack or guttering of your vehicle. Special fitment brackets can be made to order. RDU/127



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SMC can design custom mast solutions where standard products are not appropriate. Using our state of the art 2D and 3D design packages we can cater for your needs. Please contact one of our sales team to discuss your requirements.



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Options and Accessories

Compressor Range & Extension Times For NL Series

Hilomast compressors are air cooled, oil-less and of the diaphragm type. They have steel cases and are powered by electric motors. All models incorporate a pressure controlled switch to maintain the correct mast working pressure. They are quiet, maintenance free and assembled from components that have a proven reliability over many years.

Mast	Height Extended
NL.8	7.9
NL.9	8.8

Compressor Remote Control

This is a "three position" switch. It enables the mast to be extended, retracted or held at any height. These switches should be ordered with the compressor during manufacture. RC1



Magnetic Safety Switch

The purpose of this switch is to give an audio or visual warning that the telescopic mast to which it is fitted, has not been fully retracted. When fitted in a vehicle it can be used via a relay to interrupt the ignition circuit and prevent movement of the vehicle when the mast is not retracted. It is fitted to the outer tube of the mast and is operated by a set of magnets placed at the bottom of the inner mast tube. The magnets are bonded into an aluminium housing and can be easily inserted into the top section of the mast without any dismantling. The plastic end cap of the top section is removed and the magnet housing is inserted into the section. It is automatically retained in position by a neoprene 'O' ring.

NL8/12/22	MAG/50
NL10	MAG/63
NL9/16	MAG/76

Base Guy Assembly

This arrangement is generally the easiest method of erecting a mast on open ground. The kit is complete with mast fittings, 3 guys, adjusters, base plate, ground stakes and pegs. The NL kits have polyester guy ropes and special 'one way' adjusters that allow the mast to be set vertically while still supporting it by hand. NBG/127

Mast Cover

For weather protection when mast is not in use. Made of strong waterproof material. Available as an end cover or a full mast cover. Please contact one of our sales team for more information on a suitable cover for your mast. Every mast in our range has an available cover. NLB



Mast/Compressor Drain Kit

For use when retracting the mast/ opening the exhaust valve. An ideal piece of kit for venting air waste from the compressor to the outside environment when fitted inside a vehicle. 0500 50000



Climbing Steps

These are useful for field applications, providing easy access to locking collars and antennas. They clamp in any position on the mast lower section and fold upright for transit. Single steps for climbing. Double steps for resting.



Single Step	NSP/127/1
Double Step	NSP/127/2

Top Guy Assembly

For use in inclement weather conditions or to give more directional stability to top of mast. In some cases masts will withstand higher wind speeds. (Ground stakes included) The guy collar is designed to clamp to the upper end of the second from top section of mast.

NL8	NUG/2-GS
NL10	NUG/5-GS
NL12	NUG/4-GS
NL9/16	NUG/6-GS
NL22	NUG/8-GS



Rotation Handles

These handles assist the easy rotation of mast and fold to the vertical position when not in use. The aluminium collar is in two halves and can be fitted after mast installation. NRH/127



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