

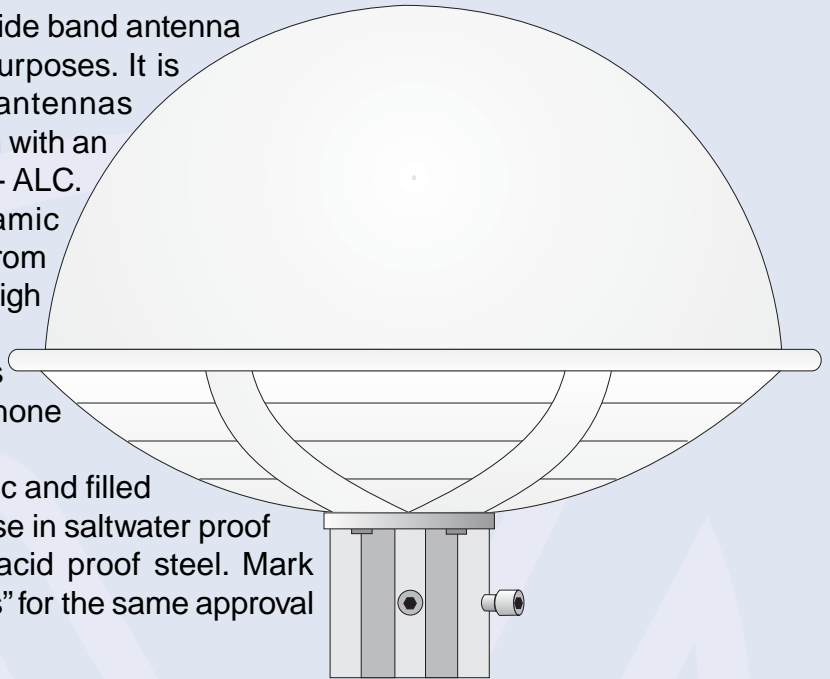
TV-FM antenna Mark 30ALC

Mark 30ALC is an omni-directional wide band antenna (40-890 MHz) TV-FM, for maritime purposes. It is based on a construction of loop antennas coupled to three band amplifiers each with an individual automatic level control unit - ALC.

The ALC's have very high dynamic range, and keep the antenna free from intermodulation even in the vicinity of high power transmitters.

High efficiency suppression filters prevent interference from VHF telephone and AIS transmitters.

Mark 30ALC is made of ABS plastic and filled with polyurethane foam. Mounting base in saltwater proof special alloy and bolts in stainless acid proof steel. Mark 30ALC is tested by "Det Norske Veritas" for the same approval as for radar equipment.



The advantages of Mark 30ALC compared to a Yagi antenna are:

- Automatic level control-ALC.
- Rigid, non-corrodible, maintenance free construction
- Small dimensions and easy to mount.
- Omni-directional, no adjustments.
- Replaceable amplifier.
- Integrated VHF/AIS suppression filters.

TECHNICAL SPECIFICATIONS

Frequency range:	40-110 MHz, ALC > 60 dB 170-230 MHz, ALC > 50 dB 470-890 MHz, ALC > 35 dB(470-700 MHz) ALC > 25 dB(700-890 MHz)
Gain:	>25 dB@40-110, 170-230 MHz >25 dB@470-890 MHz <-10 dB@ 156 MHz (Radio telephone) <-10 dB@ 162 MHz (AIS)
Return loss:	>16 dB@40 MHz -1.5 dB/octave
Noise factor:	4.5 dB
ALC limited output level:	95-100 dB μ V
Intermodulation:	CTB < -60 dBc
Output impedance:	75 ohm
Connector:	BNC male
Supply voltage:	15 V DC
Current consumption:	approx. 200 mA
EMC:	EN 50082-1, 55024-2, 55024-4
Operation temp. range:	-40 - +70°C
Weight:	3 kg
Material:	ABS white
Approvals:	DNV's Standard for Certification No 2.4, chapter 3.6.2, Sweep Sine Test, vibration strain class C

Since 1971, the objective of Naval Electronics has been to offer the best possible products for TV and Radio reception at sea. Naval began with omnidirectional antennas and is the world leader in this field of technology today. Now, with an expanded product range, the name Naval means much more than antennas. Naval operates in more than 40 countries and has installations on thousands of vessels all over the world.

All specifications stated are subject to change without notice.



Marine Broadband Communication

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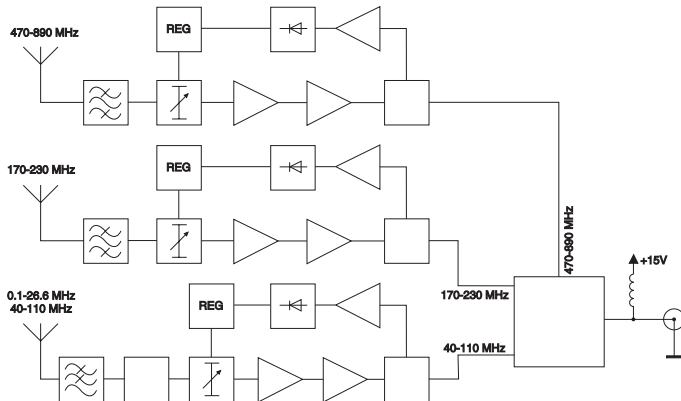
E-mail:sales@naval.se www.naval.se



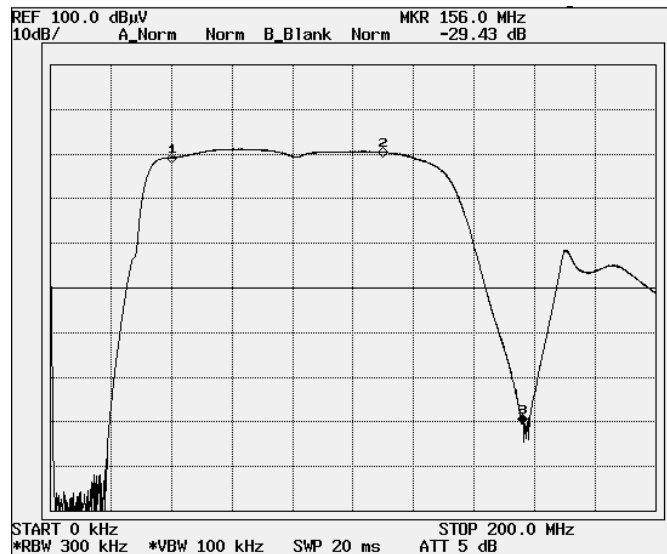
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Block diagram

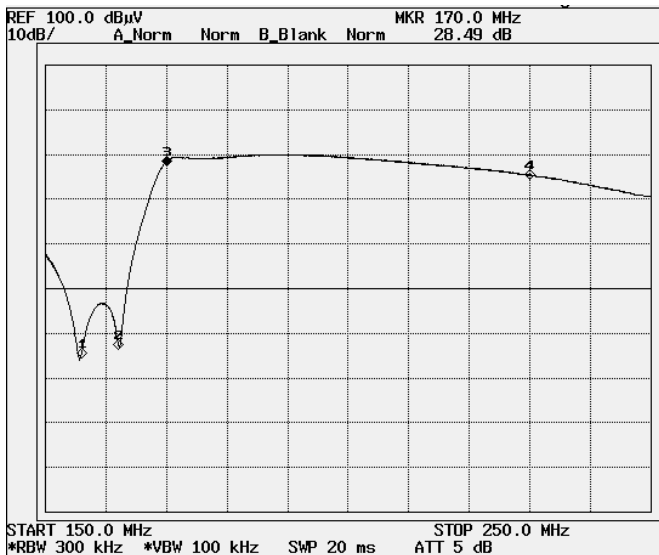


Plot BI-FM (Representative)



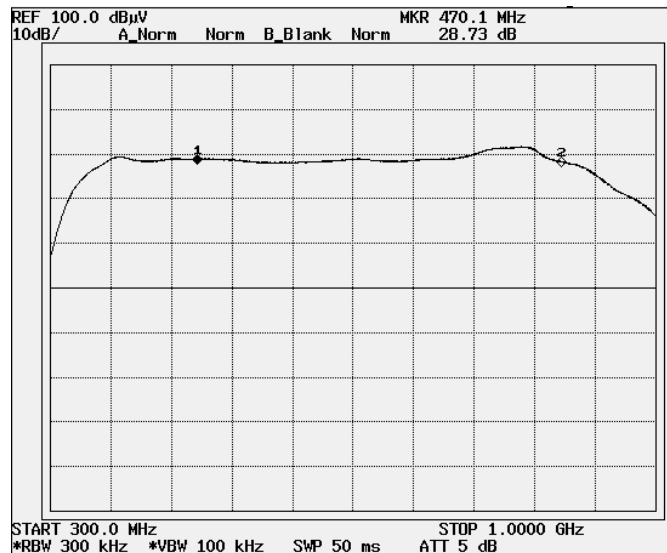
1. 40 MHz	29.1 dB	3. 156 MHz	-29.4 dB
2. 110 MHz	30.3 dB		

Plot suppression filter with VHF-AIS (Representative)



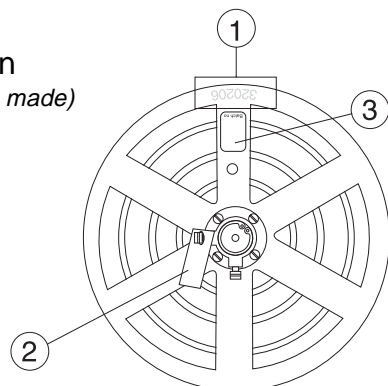
1. 156 MHz	-15.3 dB (VHF)	3. 170 MHz	28.5 dB
2. 162 MHz	-11.8 dB (AIS)	4. 230 MHz	25.3 dB

Plot UHF (Representative)



1. 470 MHz	28.7 dB	2. 890 MHz	28.2 dB
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Antenna identification (to be stated when claim is made)



1. Serial no.
2. Inspection tag
3. Type label

For installation procedure please consult
Mk 30/32ALC installation manual

Order No.
201.090

Shippingweight: 5.5 kg
Standard package: 1
Volume: 59 cdm