

TECHNOLOGY IS HERE



## Baselight - Antenna System IAM 7m IAM-D



### Lightweight | Multi-Band | Rapid Deployment

This unique Integrated Antenna Mast System is engineered for high-performance tactical communications, offering a superior alternative to traditional mast setups. Designed with a non-conductive composite structure, the system eliminates the risk of signal degradation or loss when in contact with grounded objects, ensuring uninterrupted performance in challenging field conditions. At its core, the mast incorporates a high-efficiency omni-directional antenna, delivering enhanced range and improved communication clarity—especially for VHF Omni Range (VOR) communications—making it ideal for mission-critical deployments.

#### Key Features:

- **Non-Conductive Composite Construction**  
*Eliminates signal loss from ground contact, improving operational reliability.*
- **High-Efficiency Omni-Directional Antenna**  
*Delivers extended range and superior performance for VOR communications compared to conventional systems.*
- **Multi-Band Communication Capable**  
*Supports UHF, VHF, and HF frequencies in a single deployable solution, adaptable to evolving operational needs.*
- **Lightweight & Compact Design**  
*Ideal for rapid deployment and transport by small teams—fully deployable in under 5 minutes by two personnel.*
- **Modular Expansion**  
*Compatible with additional lightweight antennas such as HF wire antennas, further enhancing its communication versatility.*

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## PHYSICAL CHARACTERISTIC

Weight : Less than 8kg

Deployed Height : 7 Meters

Deployed Time : Less than 10 Mins.

Packed System : 250mm x 320mm x 260mm

Antenna Used : Vertically Polarized Dipole

Radiation Pattern : Omnidirectional

Deployed Tube ID : Less than 80mm

Environmental : Mil Std 810G

## TECH CHARACTERISTIC

Frequency Range : 30-88 MHz(VHF)  
225-512 MHz(UHF)

Impedance : VHF-50 Ohms Nominal  
UHF-50 Ohms

Power Rating : VHF - 30W & UHF-50W

Wind Resistance : upto 100 Kmph (bare Mast)

Voltage Standing : VHF<2.8:1&UHF<2.0:1  
Wave Ratio (VSWR)

RF Connection Cable (S) : VHF 3M Length  
UHF 3M Length

RF Connection Cable (L) : VHF 20M Length  
UHF 20M Length

Nominal Gain : 2.2 dBi

## ACCESSORIES

Top Collar

Top Collar Guy Ropes

Secondary Cuff

Secondary Cuff Guy Ropes

Low Profile Base Cap

VHF Connection Cable

UHF Connection Cable

Black Rock Peg

Soft Ground Pegs

Red Rock Pegs

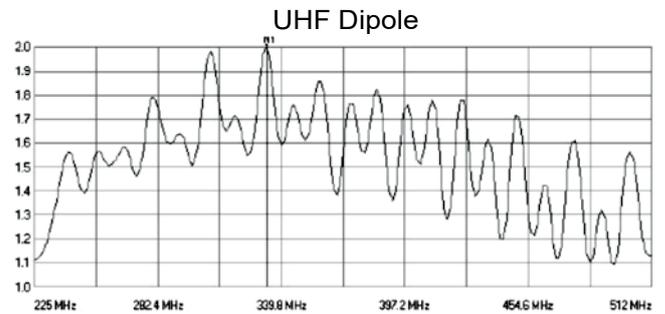
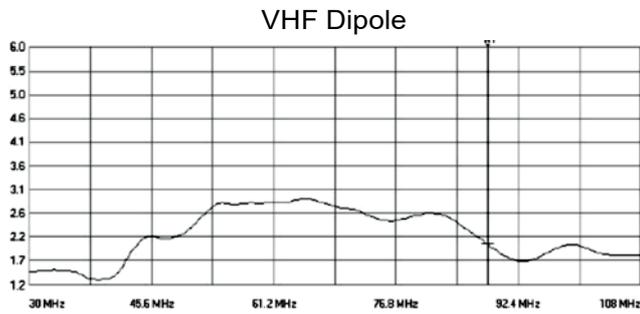
TNC (f) to BNC (m)

Carriage Bag



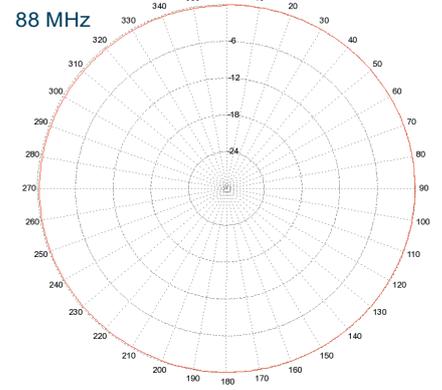
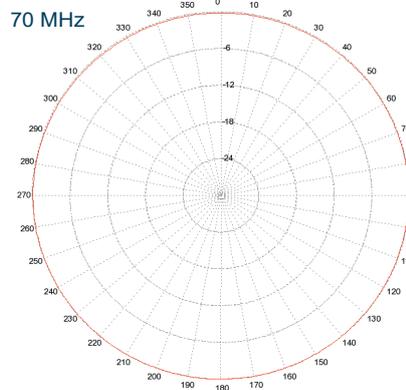
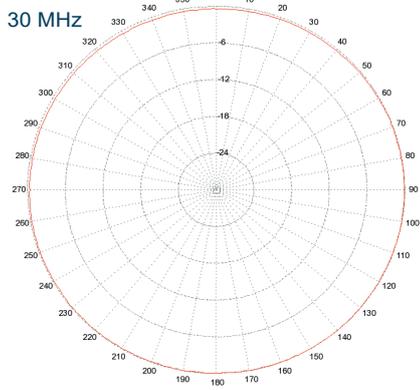
# Baselight- 7m Integrated Antenna Mast (IAM) Antenna Mast RF Data

## 1.0 VSWR

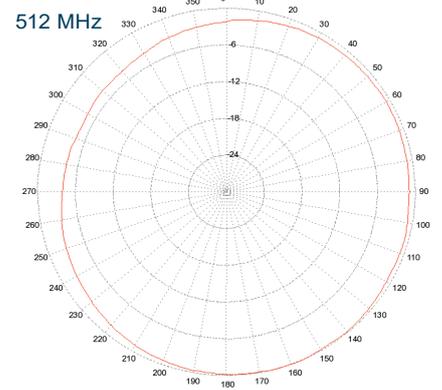
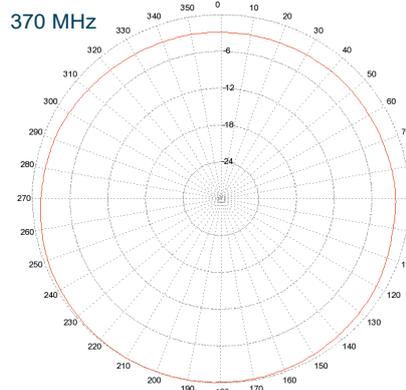
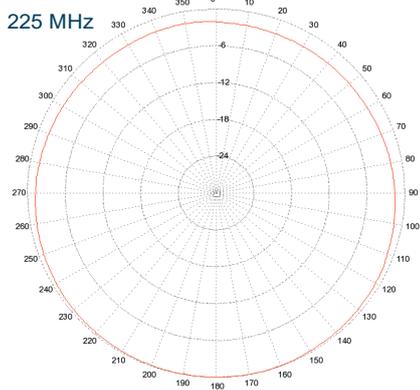


## 2.0 Polar Plots (Gain dB)

### VHF Dipole

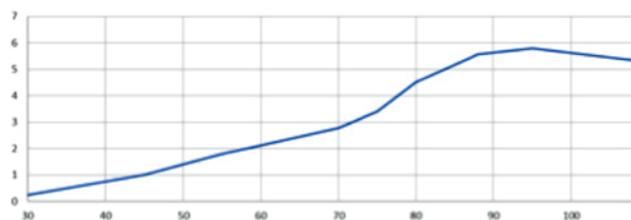


### UHF Dipole



## 3.0 Swept Gain (dBi)

### 7m IAM VHF Swept Gain



### 7m IAM UHF Swept Gain

