


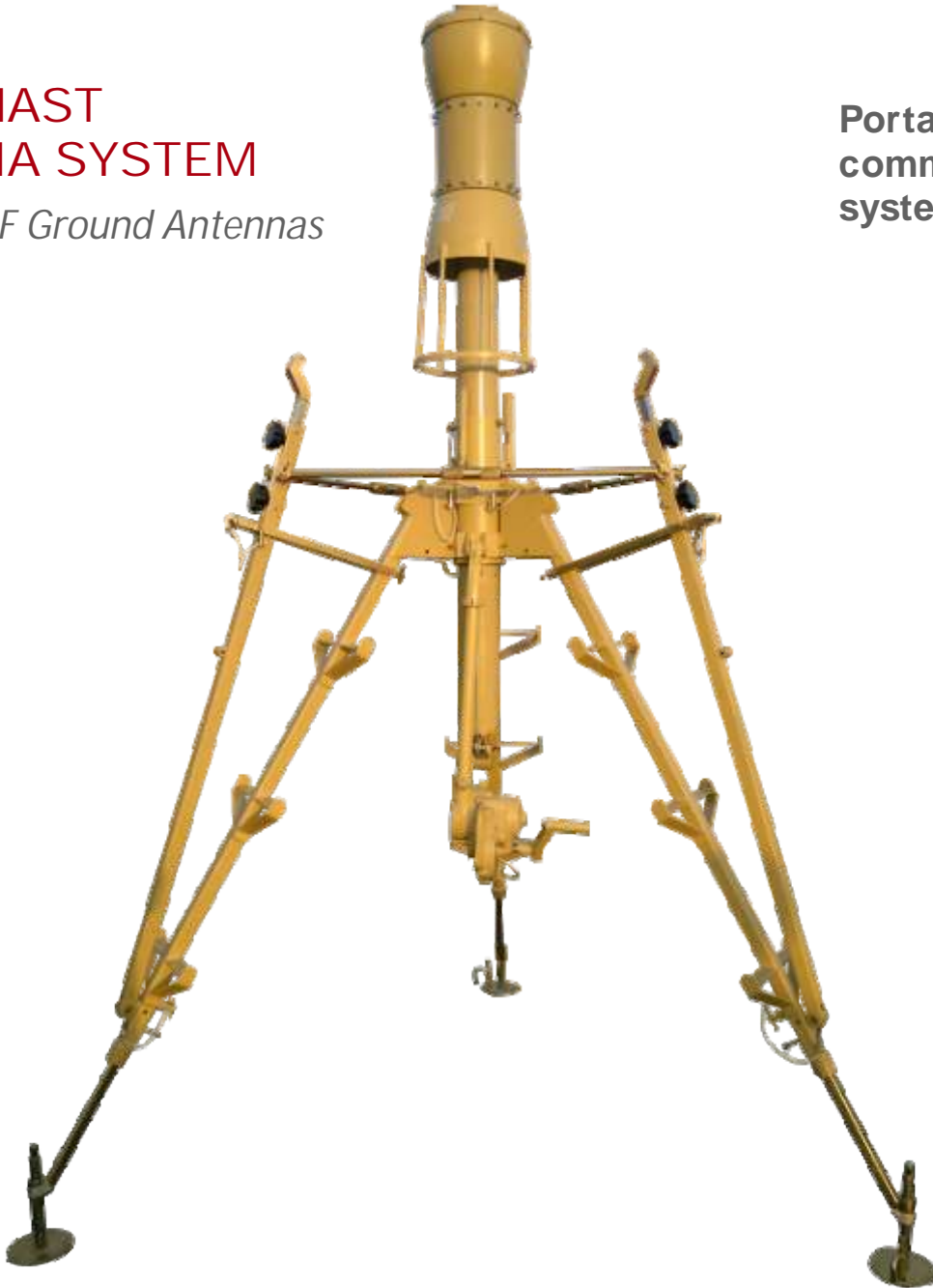


**Elektro Control Industries**  
*Your Ultimate Engineering Solutions...*

## FIBER MAST ANTENNA SYSTEM

*for VHF/UHF Ground Antennas*

**Portable & Reliable  
communication  
systems** 



[www.ecipak.com](http://www.ecipak.com)

# Main Assemblies

## Fiber Mast Antenna System ECI/FMAS-100

FMAS 100 Mast System is specially designed for the installation of VHF/UHF (Single / Dual / Multiple) ground antenna dipoles. The system can simultaneously install two Omni directional or multiple directional antenna dipoles on same axis. FMAS 100 Mast consists of following main assemblies:

1. Tripod Assembly
2. Hoist Assembly
3. Winch Assemblies
4. Insulated Decoupling Mast Segments
5. RF Cables Termination Pipe Segment
6. Glass Fiber Pipe Segments

### 1. Tripod Assembly

Complete mast is raised on a tripod based assembly. Tripod assembly is specially designed to accommodate second Omni directional antenna dipole on same axis, using extended arms principle. The tripod assembly consists of following main segments:

- Three legs each with ladder steps
- Three extended arms
- Guide box

### 2. Hoist Assembly

Hoist assembly is used to raise / lower the various mast pipe segments during installation & dismantling. Weight to load ratio is lowered through gear ratio.

### Main Features:

- Mobile unit-easy to transport
- Easy installation & dismantling
- Useable in all types of lands (Plain, hilly & desert areas)
- Time of installation : 45 minutes
- Maximum manpower required : 3-4 persons
- Metallic packing boxes
- Packing volume (LxWxH): 91"x27"x64"
- Equipment Weight: 300Kg
- Net weight with packing : 530Kg
- Compatible with R&S AK-214 System
- Special Adoption can be provided for antenna of different makes, as per customer desire.



# Main Assemblies

## 3. Winch Assembly

Winch assemblies are used to install & control the adjustments of guy wires during installation / dismantling to keep the mast straight and firm. Maximum three winch assemblies are required for full height of mast.



## 4. Insulated Decoupling Mast Segments (# 1, 2 & 3)

Decoupling mast segments are used to avoid interference/cross talk among two antenna dipoles when installed on same axis. Decoupling mast consists of three segments having a total length of 15 feet among two dipoles.

Decoupling mast segments are not required while using directional antenna.



## 5. RF Cables Termination Pipe (Segment # 4)

This assembly is used for the termination of the two antennas dipole cables. The two RF cables are further extended to radio sets externally from this pipe segment.



## 6. Glass Fiber Pipes Segments

Standard glass fiber pipe segments (each 4.5 feet long) have been used for rest of the mast. The quality of pipe segments will vary depending upon required height of mast. For a 50 feet high mast six pipe segments would be required along with three decoupling mast segments & one RF cables termination pipe.



**ECI** is a high-tech engineering solutions provider company established in 1998. It deals in the design, development and integration of critical systems for the Defense, Industrial & Commercial sectors. ECI strives to provide "Ultimate Engineering Solutions" by focusing on quality and a detailed understanding of customer needs. With a demonstrated history of performance, cost and schedule success, ECI's experienced, innovative & professionally dedicated multi-disciplinary engineering team mitigates program risk and changes problem areas into success.

ECI is an ISO-9000 certified company, which enables it to produce high quality, user friendly, innovative products with full back up support. ECI intends to become a leading engineering solutions provider to the defense and commercial sectors by expanding its products range.

## Our Strengths

- ECI delivers variety of engineering solutions,
- With user friendly technology,
- Cost effective solutions,
- Complete documentary coverage with training,
- Continued follow up support,

We believe that the measure of our worth is in the results we deliver to our customers. This is why we do not compromise in our services and customer satisfaction. We utilize our deep technological competence and industrial knowledge to deliver cutting-edge solutions and services designed to make a real and sustainable difference to business.

## Our Capabilities

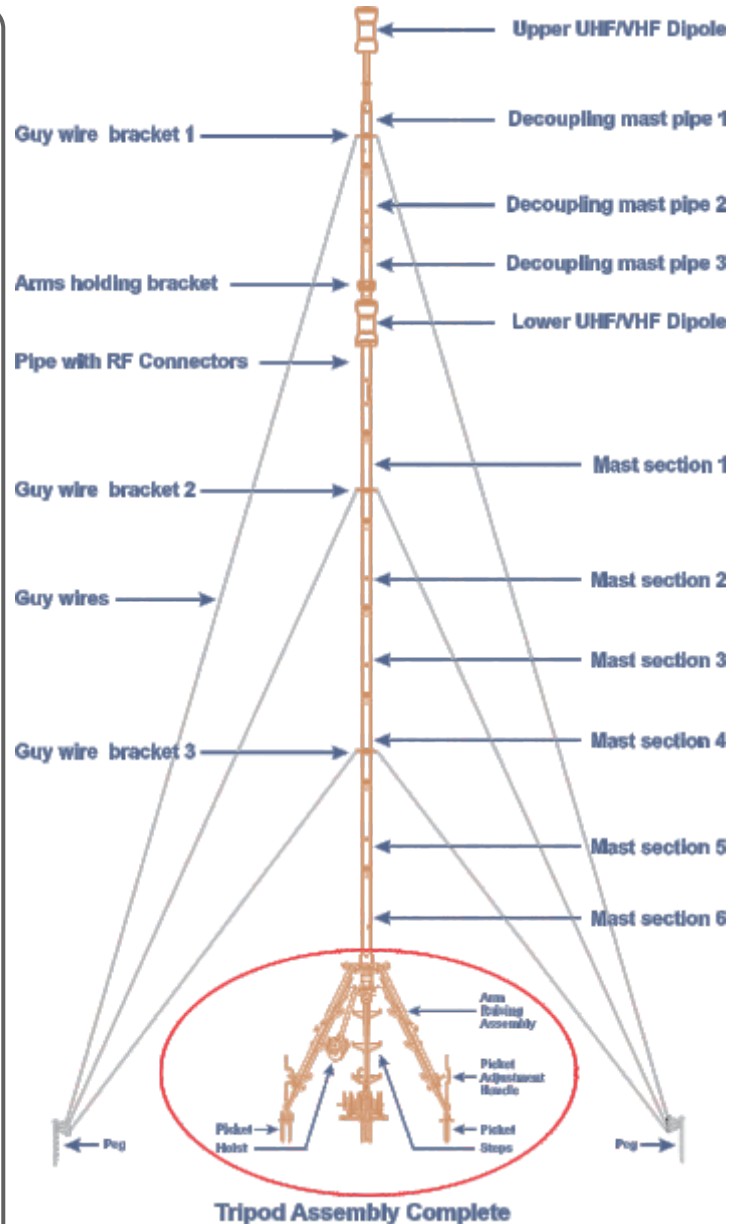
- In house Research & Development facilities
- Development of System software, Hardware & Integration
- Customer maintenance support & follow ups
- Maintaining effective Resource database (Local & Abroad)

## What We Offer

- New Products Design & Development as per market trends
- Customized System Designing on Client's Specifications
- Medium & large level Production volumes
- System Installation & Commissioning
- Training & After Sales Services

## Additional Products Range

- **LED Aviation & Obstruction Lights**
- **Customized Power Supplies for Airborne & Ground**
- **Customized Products Innovative Solutions**



Plot # 8, Service Road East, Sector I-11/4,  
Islamabad - 44000, Pakistan

T: +92 51 4431451, 4431452

F: +92 51 4445667

E: info@ecipak.com, sales@ecipak.com



www.ecipak.com