

## **M65-H36-12-IL-OB-S:** **FULL-SIZED SELF-POWERED AIRFIELD WINDSOCK MAST**

- MAA RA 3513, ICAO Annex 14 Vol I compliant.
- Solar powered lighting means zero electrical running costs & no electrical supply cabling and trenching costs to bring power supply to mast.
- Internally illuminated windsock removes glare from pilot's eyes and reduces the light required to illuminate the windsock (compared to floodlit type windsocks).
- High Quality 316 Stainless Steel Windsock Frame.
- Safe maintenance, with fitted raising and lowering winch.

### **Mast:**

- 6.5m overall height, 6m to centreline of windsock.
- All masts are fabricated from mild steel and hot-dip galvanized to BS EN ISO 1461. All holes & slots are cut prior to galvanising to ensure total corrosion protection.
- An automatic braked winch allows safe raising and lowering of the mast by one person.
- Once raised, the mast is secured upright for security by the winch cable and securing bolt.

### **Head Unit: - Illumination and Mounting of Windsock**

- The light source is fixed, with the windsock frame and light shield rotating around it, for maximum reliability. This removes the need for a less reliable, more expensive slip ring normally used to transfer electrical power to a rotating light. The design is also more responsive as only the windsock frame rotates – not the weight of the light, and the slip ring friction is also reduced by the bearings used.
- 2 no. LED light sources are used for reliability; each has a projected life of 50,000 hours. They are wired independently to prevent lack of illumination in the event of one lamp failure.

- The windsock is attached to a freely rotating cage, which is mounted on two Stainless Steel sealed bearings for great responsiveness.
- The lamp is shielded from mouth of windsock by a stainless-steel shroud (with reflective inside to project maximum brightness into the windsock) to prevent pilot glare.
- A Red LED Obstruction Light is fitted above the windsock.

### **Power Source:**

- Power supply is from a weatherproof IP65 galvanized steel cabinet mounted on the Base Post, containing (at least) 2 no. 12V DC sealed gel batteries & charge control equipment. The battery bank has a minimum of 5 days autonomy.
- The batteries are automatically charged by 2 no. Solar Panel(s) on the Mast. Charge from both sources is managed by separate MPPT controllers to prevent over-charging of batteries. These also prevent over-discharge.
- An Automatic Photocell switch for Illumination & Obstruction Light is mounted in the cabinet wall. The Obstruction Light can be left switched on 24/7 if required, using an over-ride switch in the cabinet. Photocells cannot tell when fog is present in daylight, hence this feature.
- Fully automatic operation year-round. Power generation and storage (i.e. the wind generator, solar panel(s) and their mounting angle, and the batteries) are chosen for the end-use location. Length of longest night, solar insolation and weather for your location are all researched to deliver this performance.
- A battery monitor wired inside the cabinet gives information about the State of Charge, along with a range of other information for maintenance purposes.
- The system is fully assembled and tested prior to despatch. A wiring schematic is supplied, laminated inside the cabinet door.



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### Windsock:

- 3.6m / 12ft long x 0.90m / 36" mouth diameter x 0.3m / 12" tail diameter.
- Made from Day – Glow orange polyester, longer lasting than nylon or cotton.
- Double stitched with marine grade thread for durability.
- Attached to frame with supplied set of UV resistant cable ties.
- Replacement interval at International Airports we supply is approx. 8 months.

### Optional Installation:

- Delivery & fitting of Windsock Mast (we do not normally offer groundworks, as this is normally available from your normal ground maintenance team).
- Assembly & Commissioning of mast
- Removal of old mast if required

A full package of documents is included with each mast, as follows:

- Wiring Diagram
- Assembly & installation instructions (including foundation requirements)
- Maintenance Instructions



Internal Illumination at night



Battery Control Cabinet



Securing Bolt & Winch Cable at base of mast

Custom adaptations can be made to suit individual requirements. This includes, for example, providing a bolt-down base plate to match & use existing ground anchors.