

# Illuminated Wind Direction Indicator



Designed to meet requirements of: CASA MOS Part 139 Chapter 9 Section 9.6 (PAL)  
FAA AC150/4653-27D (mechanical)

Made in Australia

THE WSS AVILITE SYSTEM IS MADE FOR AIRPORT OWNERS AND OPERATORS WHOSE CRITICAL REQUIREMENTS ARE INDEPENDENT PILOT ACTIVATION, LONG-TERM RELIABILITY AND EASY MAINTENANCE

## APPLICATION

The WSS AviLite Illuminated Wind Direction Indicator (IWDI) provides pilots with a visual representation of approximate wind direction and speed. At night, the IWDI is illuminated with an array of overhead lights to highlight the wind sleeve and the ground signal area used to provide aerodrome status.

The IWDI is usually located near the airfield apron. It provides a central point for on/off control of AVILITE airfield lighting systems.

## PHOTOMETRIC

**Solar Powered Lighting:** When utilising solar recharged batteries as the source of power, the overhead light array is fitted with a minimum of four 12V 20W wide angle luminaires. This provides good illumination across the wind sleeve when no extraneous lighting is present.

**Mains Powered Lighting:** The availability of mains power allows the light array to be fitted with eight 200W (PAR38) floodlights to meet CASA requirements specified by CASA MOS Part 139 Chapter 9.

## PHYSICAL

### Bearing Head Assembly

Dimensions are for assembly only and do not include main pole

1.1m (H) x 0.8m (L) x 0.92m (W)

Weight: 3.8Kg.

### Wind Sleeve

0.9m (max) x 3.3m. Weight 0.35Kg

### Controller Cabinet

Dimensions: 400mm x 400mm x 300mm

Weight (excluding battery): 6.5Kg

Battery weight: 21Kg.

## FEATURES

- > Separate control cabinet assembly provides easy mounting option for a hinged pole design. Control cabinet can mount on fixed poles at convenient height for maintenance.
- > Simple wind sleeve attachment to rotating head via 4x 20mm fixed eyebolts on extension arm.
- > Two sealed and weather protected roller bearings are used for long-term mechanical reliability and low speed directional response.
- > Photovoltaic panel can be mounted in a variety of positions to suit local conditions.
- > Centrally mounted HF monopole antenna utilises cross arms of light array as a radio ground plane to enhance its transmission pattern for complete aerodrome code coverage.
- > Bearing head assembly has epoxy coat finish to provide long-term protection.
- > Provision for easy mounting of single or dual obstruction light.

## FOOTINGS AND POLE

**Please refer/request datasheet:**

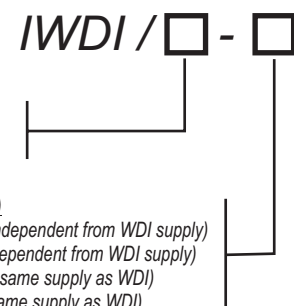
D  
IWDI Footings and Main Pole.

## ORDERING

FUNCTIONAL PART  
TA - TOP ASSEMBLY  
CU - CONTROL UNIT / frequency

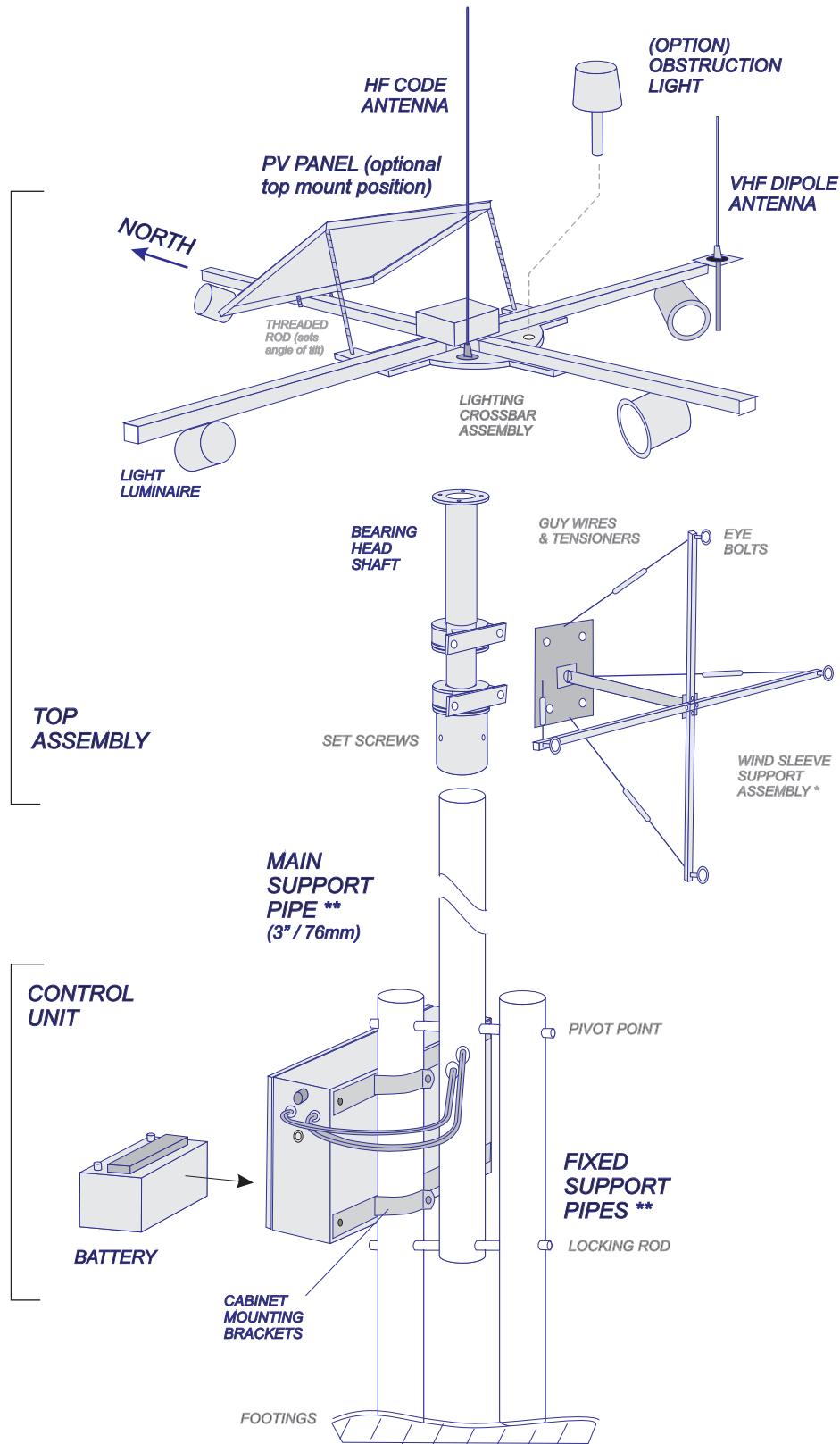
### OBSTRUCTION LIGHT (OPTION)

- 1 Single obstruction light (solar, independent from WDI supply)
- 2 Dual obstruction light (solar, independent from WDI supply)
- 3 Single obstruction light (utilises same supply as WDI)
- 4 Dual obstruction light (utilises same supply as WDI)



Pilot Activated Airfield Lighting  
**Illuminated Wind  
 Direction Indicator**

Parts Breakdown and  
 Spares Identification



**NOT TO SCALE**

\* Wind Sleeve must be purchased seperately

\*\* Main and fixed support pipes supplied by others.