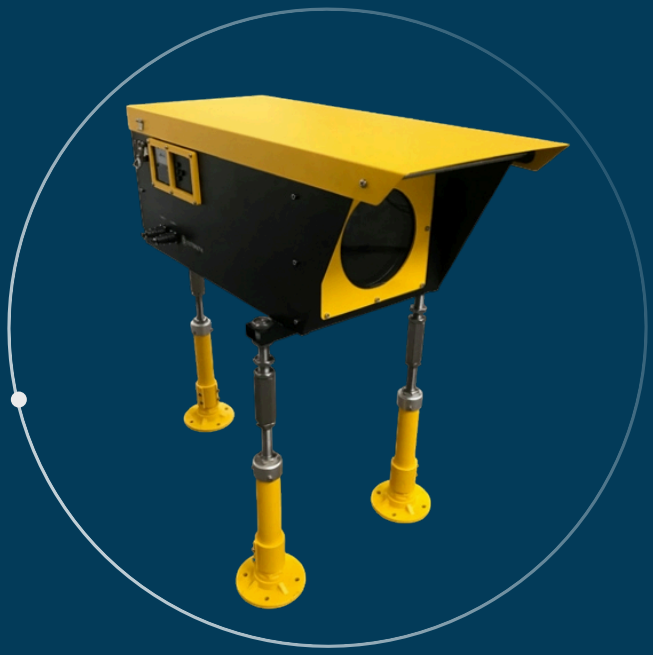
ish bilan

HAPI-LED
HELICOPTER APPROACH PATH INDICATOR



RELATED STANDARDS

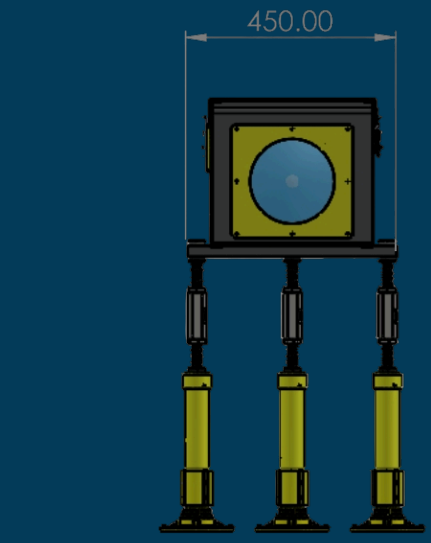
FAA AC 150/5390-2 (Current Edition).
ICAO Annex 14, Vol.2 Para 5.3.5.6 to 5.3.5.26

APPLICATIONS

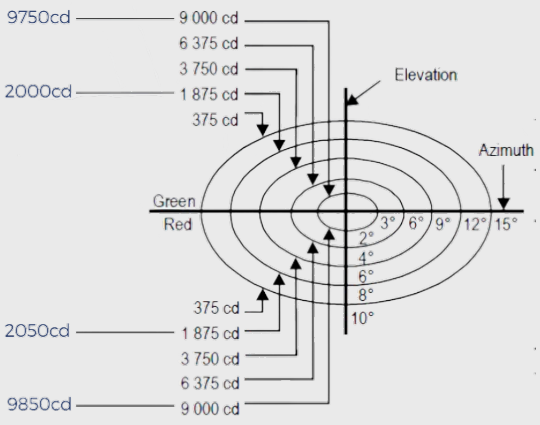
The HAPI (Helicopter Approach Path Indicator) system uses a multi-LED array to form a single light channel on each light unit to provide the pilot with precise visual information, enabling the approach procedure is to be performed with the utmost accuracy and safety.
Helicopter is on the correct approach path, the pilot will see steady green light indicator. If the helicopter approach is too high, flashing green light indicator will be seen. If the approach is too low, the helicopter will be seen steady red light indicator.
-Style A (voltage-powered) system is for use with 120 VAC or 240 VAC, 50/60 Hz voltage input.
-Style B (current powered) system is for use with 2.8A 6.6A,CCR

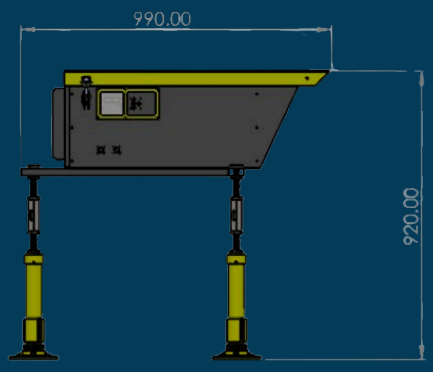
IMPORTANT FEATURES

- LEDs greatly increase light source life and significantly reduce maintenance costs.
- Aerodynamic and small in size.
- Long LED life (>60.000 hrs) for LED HAPI.
- Unique, sealed optical chamber is designed to prevent dew/frost on LED optical elements.
- Low-power design contributes to a lower life cycle cost and lower cost for CCRs and supporting equipment.
- Use of LED light source improves safety and pilot recognition by eliminating color shifts typical of incandescent light sources at lower intensity settings.
- Current powered systems operate on either a design in compliance with IEC or FAA requirements.
- Mounting and calibration are done easily with special equipment or build in inclinometer.
- Sharp transition from white to red and the intensity changes less than 3 times throughout the full beam width.
- Waterproof dustproof thanks to the sleeve gasket, internal water drained through outlets.
- Includes an integral deflection plate on the top front edge of the light unit cover to prevent the pilot from seeing reflected light from the top of the light unit during the approach.
- Body is painted black. The top cover is painted aviation yellow for ICAO systems.



PHOTOMETRIC PERFORMANCE





+98 41 3425 0835
www.ishbilan.com

Electronic Unit

Led HAPI product is controlled by microcontroller-based the electronic control unit.

Optionally, the system has a long-distance RF communication infrastructure. In this way, system errors are instantly transferred to the Central Receiver Unit in the Air Traffic Control Tower and operators receive instant feedback.

Optionally, there is a dry contact fault relay in the system. In case of any malfunction, this relay is activated and a notification is sent to the remote control panel.

The Electronic Controller Consists of the Following Units:
- Transformers
- Power Supply Unit
- Main Controller with CANBUS Communication
- Dedicated Industrial Type Slope/Angle Sensor
- Keypad With 4 Buttons
- 6 Digits 7 Segment Led Display
- 2 Indicator Leds. Heartbeat Led and System Enabled Led
- Over Voltage/Current Protection Unit

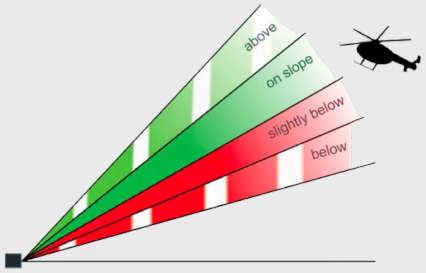
The Main Tasks Of The Electronic Controller Are:
- Controlling Buttons And Display
- Measuring Line Current And Driving Leds At Corresponding Brightness's
- To Follow the Faulty Led Status And Turn Off The Whole System In Case Of Led Failure
- Measuring The Slope/Angle And Shutting Down The Entire System In Case Of Positive Or Negative Slope/Angle Tilts

The Following Operations Can Be Performed With The Screen And Buttons:
- Instant Tracking Of The Angle
- Enabling And Disabling Of The System
- Adjustment Of Positive And Negative Angle Tilt Degree
- Change Of Device ID
- Enabling And Disabling Of CANBUS Communication

Technical Specifications

- Protection Degree : IP55
- Relative Humidity : up to %100
- Working Temperature : -40 C to +55 C
- Power Consumption : 75VA (100VA with arctic kit)
- Optional : Solar Kit
- Optional : IR-NVG

Hapi Signal Format



MATERIALS & FINISH

Aluminum body is chromate treated and electrostatic powder coated. The color is aviation yellow and hardware is made of stainless steel. Legs are made of aluminum tubing

WEIGHT

Net weight is 33 kg.

PACKING INFO

- In wooden box of 55x110x105(h)cm
- Net weight is 45 KG