

# OBSTA H.I.S.T.I.M.

The OBSTA H.I.S.T.I.M. warning light supplied by the AC power line combines the advantages of an integrated assembly and the modularity for the servicing. A neon discharge lamp has a **very long lifetime** but it requires very high voltages to operate. In addition to the electronic technology supplying this discharge lamp, the design of the **unscrewable** and **interchangeable** luminous part allows to :

- avoid the high voltage plugs,
- offer additional functions,
- reduce drastically the weight and wind load.

Without external high voltage connections between the converter and lamp, this new concept is more reliable in :

- safety for people against electrical shocks,
- no more interferences due to poor electrical contacts,
- no corrosion.

This design also allows :

- indication of the presence of the luminous element,
- monitoring the end of life of the lamp.

Those incidents are indicated by the switching of a potential free contact to supply a stand by lamp or to remotely monitor an alarm (easier redundant installation).

The electronic converter is completely isolated. A complete screening around the converter and the lamp allows to operate in the strongest electromagnetic fields.

The OBSTA H.I.S.T.I.M. is regulated to operate at constant power (so is the luminous intensity).

## Application

The OBSTA H.I.S.T.I.M. is a beacon light for obstacles to air traffic (buildings, chimney stacks, pylons, cranes, etc...). It falls into the ICAO and F.A.A. low-intensity category, improved (type B).

The neon discharge used offers :

- inherent generation of "aviation" red
- a very long life
- excellent luminous efficiency.

The OBSTA H.I.S.T.I.M. draws its power directly from the mains supply.

The luminous intensity generated by the OBSTA H.I.S.T.I.M. (35 candelas) is far higher than the minimum the ICAO regulations require (10 candelas). It considerably increases the visibility of the beacon. This value also complies with the FAA standards in force (minimum required : 32 candelas)



## Description

The OBSTA H.I.S.T.I.M. is built in two parts. The main part is a completed molded cylindrical assembly which includes a constant-power converter. The 13 turn discharge lamp is screwed on the top of it.

This new design ensures :

- no external High Voltage connections
- perfect watertightness of the 2 parts
- an isolation from the ground which avoids any voltage return from the earth (for example due to lightning). The overall reliability is thus considerably improved.

The OBSTA H.I.S.T.I.M. also includes :

- protection against transient overvoltage
- circuitry to monitor the normal operation of the lamp and, in case of failure, to trigger a remote alarm or easily light upon auxiliary stand-by lamp (if active redundant circuits are used).

Auxiliary functions are also available (photoelectric cell.).

The OBSTA H.I.S.T.I.M. is delivered with 2 collars to be mounted with an adjustable distance for easy installation and does not require any servicing.

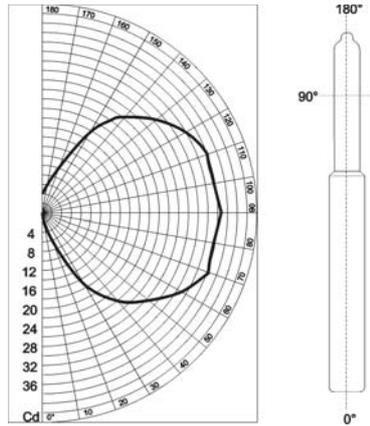
## Main Characteristics

OBSTA H.I.S.T.I.M.	Power supply	Luminous intensity	Consumed current	Nominal power	Typical lifetime
P/N 13150	230 V ~ 50/60 Hz	> 32 cd	370 mA @ 240 V ~	45 W	100 000 hours

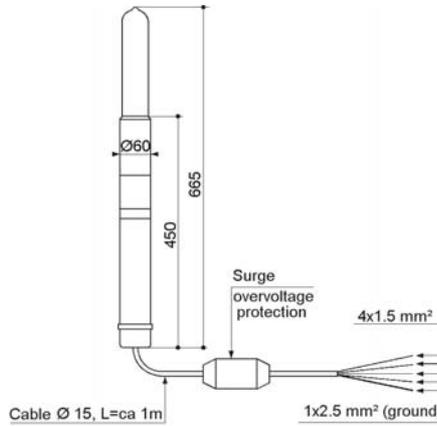
## Spare parts

Designation	Code	Number of turns	Luminous intensity	Typical lifetime
<b>OBSTA H.I.M. LAMP</b>	13156	13	35 cd	100 000 hours
<b>H.I.S.T.I.M. 230 VAC CONVERTER</b>	13155			100 000 hours

**Complementary characteristics**  
**Light intensity diagram**



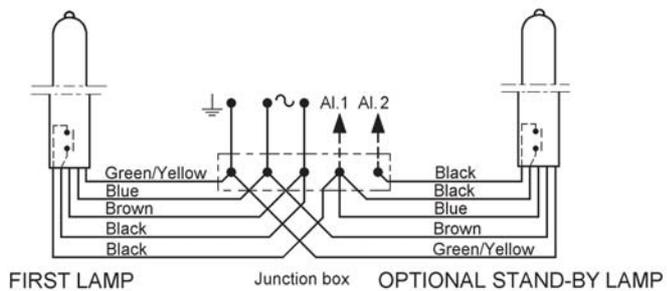
**IP degree** : ..... 66  
**Operating temperature** : .... -30 to +60 °C  
**Power voltage** : ..... 220 to 240 V AC (+/-10%) - 50/60 Hz  
**Weight** : ..... 3 kg  
**Overall dimensions (in mm)** :



**Attachment** : ..... with 2 collars  
**Connection** : ..... on bare wires (2 power wires, 2 alarm)  
**Maintenance** : ..... none  
**Specific cautions** : ..... - for chimney installations, secure the lamp beneath the top (1,5 to 3m), in accordance with ICAO's recommendations.  
 - For installation with RFI risk, the power supply cable must be shielded.

**Complementary functions :**

- Out of order alarm (relay switching)



- Automatic emergency lamp configuration enabling automatic control of an emergency lamp and/or an alarm in case of fault with the main lamp (active redundancy) (see diagram)
- Control by crepuscular photocell.
- EMC Specification EN 55011, class B.