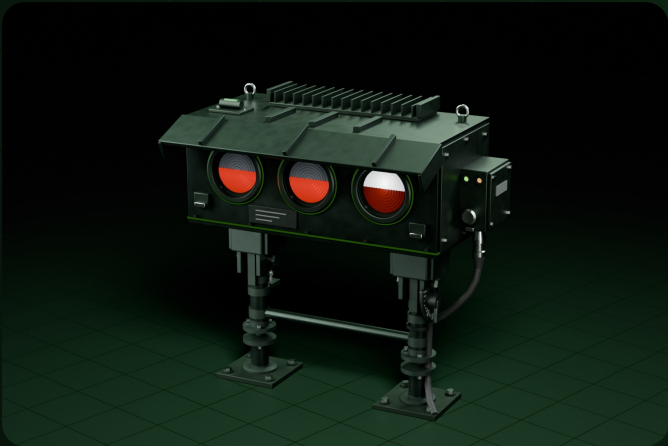


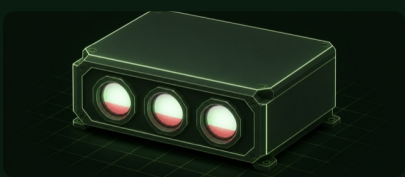
PAPI SYSTEMS



A PAPI unit is an assembled optical fixture rather than a single lamp, combining a projector housing, colour filter, light source, and aiming mechanism into one field-mountable unit. Each part has a distinct role in producing a sharp, correctly angled red and white beam, and the whole unit sits on a frangible mount wired into the runway's constant current series circuit.



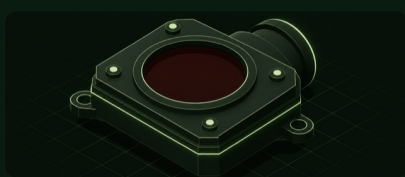
Body material	Cast aluminium alloy housing with corrosion-resistant outdoor finish
Ingress protection approach	Sealed optical chamber designed for continuous outdoor exposure
Power options	Constant current series circuit supply via isolating transformer, matched to the runway lighting circuit
Control compatibility	Brightness step selection via ALCMS or manual regulator step control
Mounting	Frangible low-profile ground mount per aerodrome obstacle safety requirements
Operating environment	Rated for sustained high-temperature, dust, and sand exposure



01

OPTICAL PROJECTOR BOX

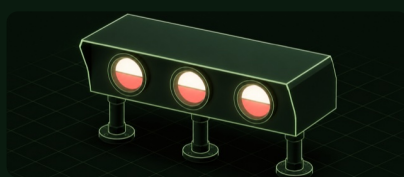
Houses the optical train that shapes the light source's output into a narrow, high-intensity beam. Its internal geometry sets the sharp transition line between the red and white sectors that a pilot reads on approach.



02

COLOUR FILTER ASSEMBLY

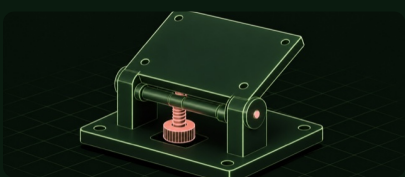
A precision red filter fitted across part of the beam path to split the projected light into red and white halves. Filter alignment directly determines how sharp and stable the colour transition appears from the cockpit.



03

LED LIGHT SOURCE

Provides the high-intensity output the optical projector shapes into a beam. An LED source holds its intensity and colour output steady over long service life compared with older lamp technology.



04

ANGULAR TILT MECHANISM

A fine adjustment mechanism that sets and locks the unit's vertical aiming angle against the runway's design glide path. Correct tilt setting is what makes the red/white transition line correspond to the intended approach angle.



05

FRANGIBLE MOUNTING LEGS

Low-profile support legs designed to break away cleanly on impact, meeting aerodrome frangibility requirements for objects near a runway or approach surface. This limits risk to an aircraft that inadvertently contacts the unit.



06

POWER AND CONTROL INTERFACE

Connects the unit to the runway's constant current series circuit and, where fitted, to the brightness step control signal. It is the electrical link between the PAPI unit and the wider airfield lighting circuit.