

PAPI

Precision Approach Path Indicator

Compliances:

- FAA AC 150/5345-28: L-880 and L-881
- ICAO Annex 14



Applications

The PAPI System provides the pilot a positive visual indication of the aircraft's position relative to the optimal glide slope during final approach to the runway.

The L-880 PAPI system consists of four units in a line or bar, each unit having two or three 200 watt lamps. The PAPI unit produces a beam of light, the upper portion being white, the lower red. As the pilot's vertical position changes, the color of the light as seen by the pilot changes instantaneously.

The Style A PAPI uses a Power and Control Unit (PCU) which has a photocell for automatic day/night intensity control. The PCU can be operated by using an L-854 radio controller signaled by an approaching aircraft. The Style B PAPI is powered by an L-828 constant current regulator.

Features

PAPI UNIT

- ETL Certified
- 1000 Hour Lamps
- Meets ICAO Recommendations
- Sharp Signal Transition: less than 3 Minutes of Arc
- Precise Setting Tool: ± 2 Minutes of Arc
- Lamp Bypass Circuit (Style B)
- Tilt Switch Indicator Lights (Style B)

POWER AND CONTROL UNIT(PCU)

(Style A)

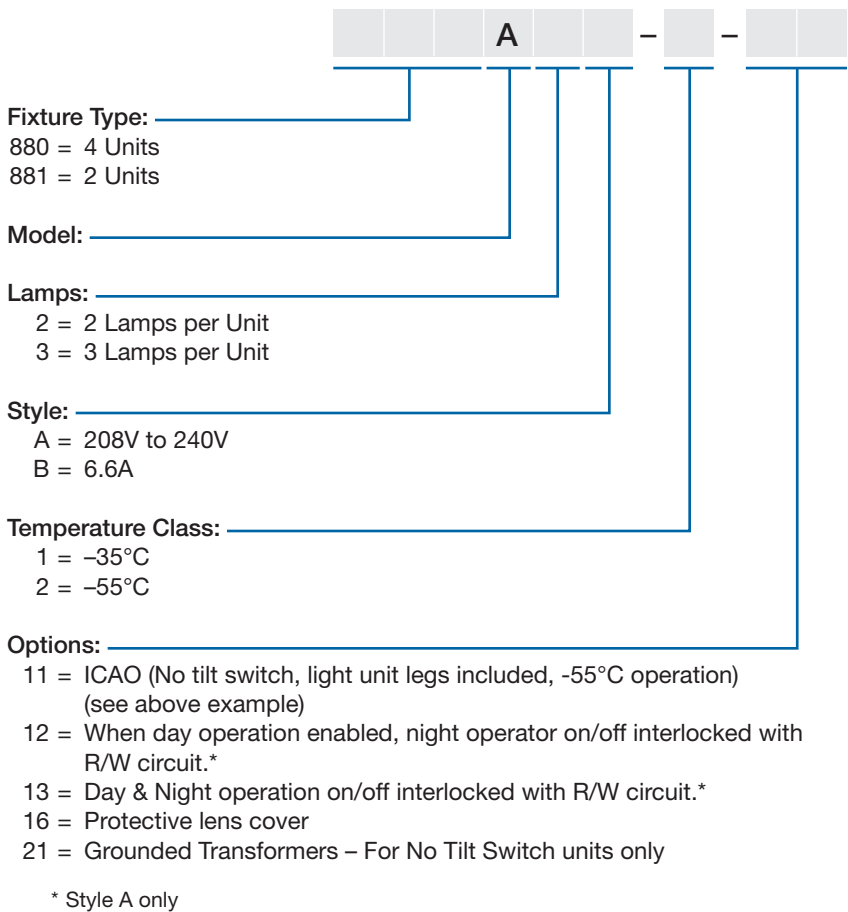
- Power Circuit Breaker
- Adjustable Power Supply - 195 to 265 VAC
- 50 Hz or 60 Hz Operation
- Indicator Lights:
 - Internal D.C. Power Supply Operation
 - Remote Control Status
 - Tilt Switch Status
 - Lamp Circuit Overvoltage
 - Photocell Status
 - Main Contactor Status
 - High Intensity Mode
 - Remote Control Override

Ordering Information

How to Order: Construct the basic catalog number based on the number of units per system and the power available. Add dash numbers for the temperature class and options. Style A includes the PCU. Style B includes the isolation transformers and connector kits. Above ground mounting hardware is included except 2 inch EMT for the legs. Order baseplates, transformer bases, and all other below ground items separately.

Examples: 880A2A-2 is an FAA L-880 system. It includes the PCU and tilt switches for voltage operation.

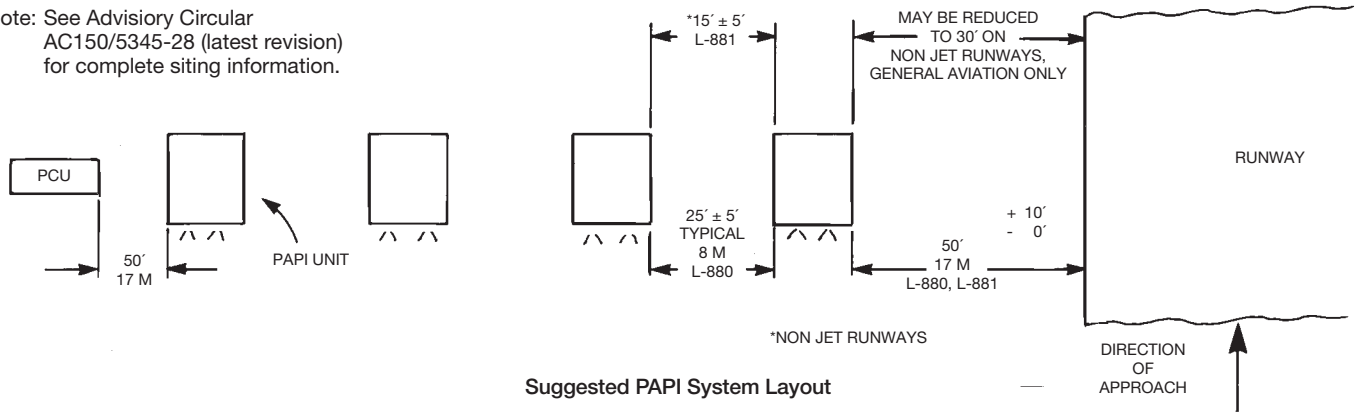
880A2B-2-11 is an ICAO PAPI system. It includes the EMT legs and it does not have tilt switches.



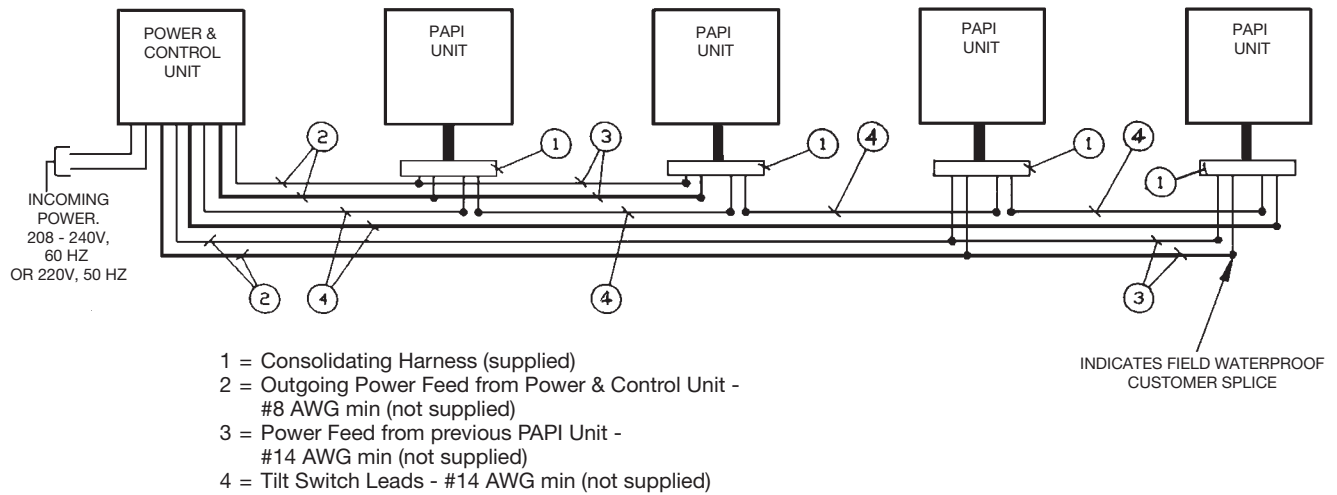
Note: Order one clinometer (aiming device) 25220 separately.

Installation Information

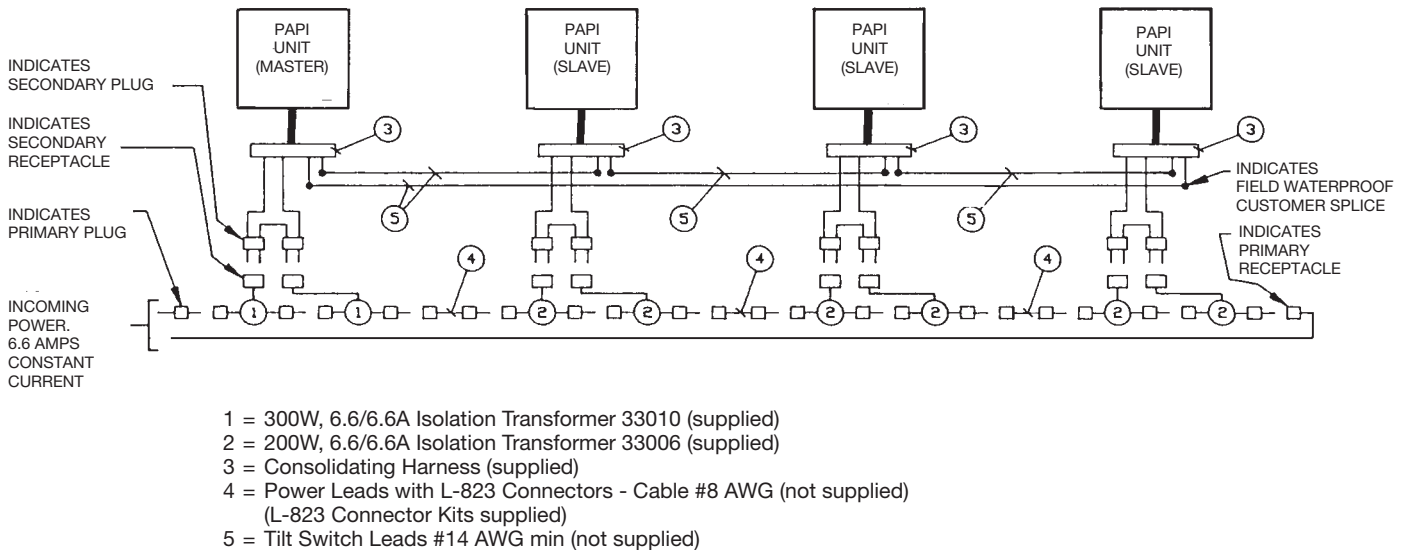
Note: See Advisory Circular AC150/5345-28 (latest revision) for complete siting information.



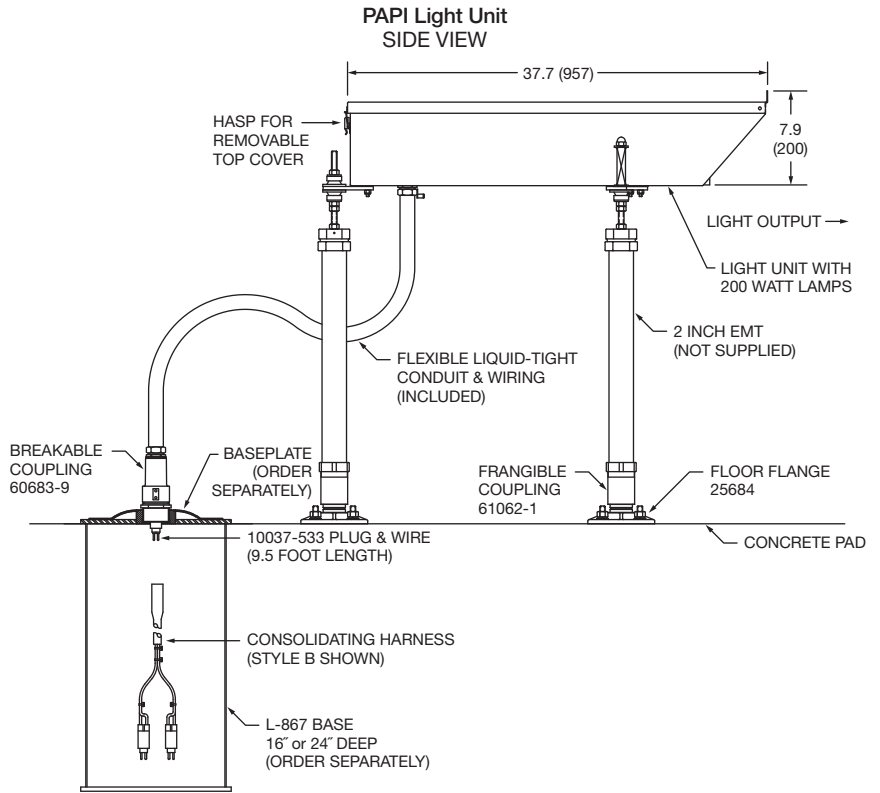
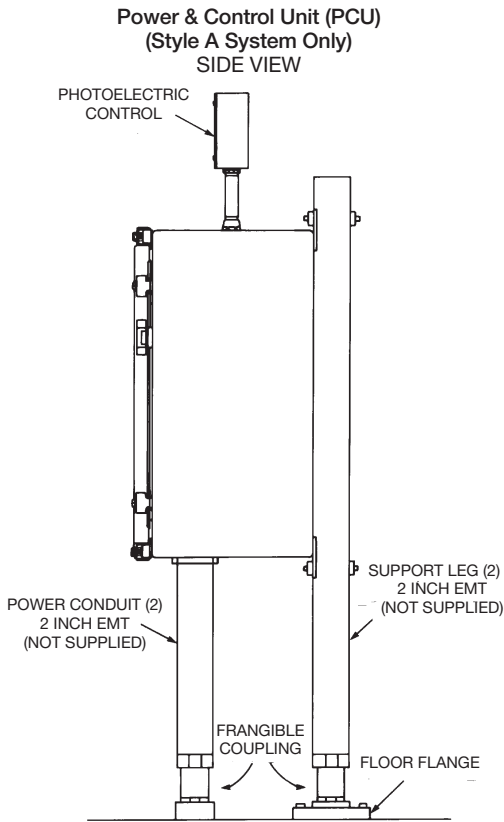
Typical Wiring Diagram: FAA Style A



Typical Wiring Diagram: FAA Style B (2-Lamps)

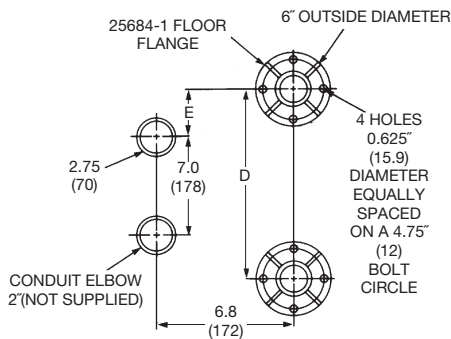


Outline Drawings



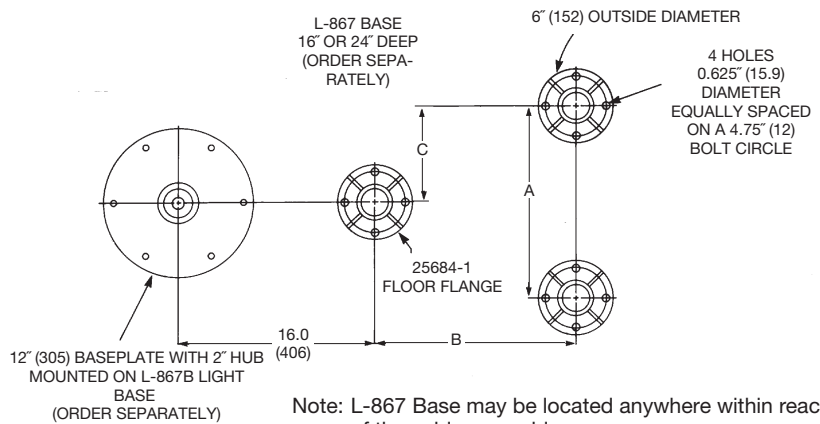
Note: L-867 Base may be located anywhere within reach of the cable assembly.

PCU Footing Plan



Note: PCU mounting height is not specified. It is recommended to minimize the mounting height. The PCU may be wall mounted.

PAPI Unit Footing Plan



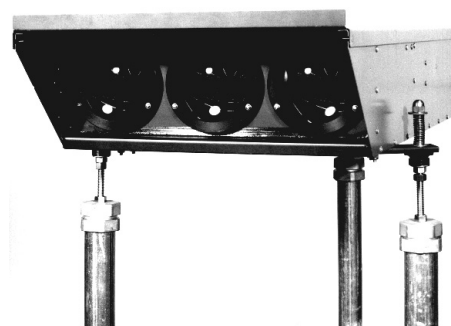
Note: L-867 Base may be located anywhere within reach of the cable assembly.

Footing Dimensions Chart

Inches (Millimeters)	A	B	C	D	E
PAPI Light Unit 2-Lamp	15.75 (400)	25.75 (654)	7.9 (200)	—	—
PAPI Light Unit 3-Lamp	22.50 (572)	25.75 (654)	11.25 (286)	—	—
PCU for 8803A Systems	—	—	—	18.0 (457)	5.5 (140)
All other PCU's	—	—	—	10.0 (254)	1.5 (38)

Dimensions:	inches (mm)		
Instruction Manual	2438 (2-Lamp) 2439 (3-Lamp)		
Shipping Weight:	Light Unit (2)* 75 lbs. 34 kg.	Light Unit (3)* 100 lbs. 45 kg.	PCU 105 lbs. 48 kg.
Shipping Volume:	9.3 cu.ft. 0.26 cu.m.	12 cu.ft. 0.34 cu.m.	3.7 cu.ft. 0.10 cu.m.
Photometric Data: Contact Field Services			

* Each Unit



3-Lamp Light Unit

Accessories

Item Description	Catalog Number	Shipping Weight		Shipping Volume	
		lb.	kg.	cu.ft.	cu.m.
Base L-867, class I, 24" deep	21242Q200301	52	23.6	2.6	0.074
Clinometer/Tilt Level	25220				
Baseplate, 2' Hub	AP1932	8	3.6	0.14	0.004

Renewal Parts

Description	Part Number	Description	Part Number
PAPI UNIT			
Breakable Coupling (1 per Unit)	60683-9	Lamp 200W (replaces 20531)	10047-2896
Breakable Coupling (3 per Unit)	61062-1	Lamp Socket	40749
Connector Kit L-823, 8 AWG, .32" to .43" O.D.	823KP-D4-D4	Plug 4-Pin with 4-Conductor wire 9.5'	10037-533
Consolidating Harness Style A	10037-534	Red Filter	27069
Consolidating Harness Style B - FAA (2-Lamp)	27068-1	Tilt Switch (Class 1)	25225-1
Consolidating Harness Style B - FAA (3-Lamp)	27068-3	Tilt Switch (Class 2, Style A)	25225-4
Consolidating Harness Style B - ICAO	27068-2	Tilt Switch (Class 2, Style B)	25225-3
Floor Flange (3 per Unit)	25684-1	Tilt Switch Control Board (2-Lamp)	27123-1
Isolation Transformer 100W		Tilt Switch Control Board (3-Lamp)	27123-2
(Style B 3 lamp master)	33004	Tilt Switch Control Board (3-Lamp)	27123-3
Isolation Transformer 200W (Style B Slave)	33006	Transformer T1	31329
Isolation Transformer 300W			
(Style B 2 & 3 lamp master)	33010		
PCU			
Floor Flange (2 per PCU)	25684-1	Power & Control Unit (PCU) PC Board	
Frangible Coupling (4 per PCU)	61062-1	with Options "12"	27138-3
Fuse F1	10047-1005	Relay K1,K2	10047-2901
Fuse F2	10047-1143	Transformer T1, 1800VA	27038
Lightning Arrestor	10047-885	Transformer T1, 2800VA	27120
Photocell Assembly	27045	Transformer T1, 900VA	27039
Power & Control Unit (PCU) PC Board Standard with no Options	27138-1		
SPARE PAPI UNITS:			
(Without Harness & Mounting Hardware)*	2-Lamp 3-Lamp		2-Lamp 3-Lamp
Style A, Class 1	27178-1 27179-1	Style B, Class 1 (Slave)	27178-5 27179-5
Style A, Class 2	27178-2 27179-2	Style B, Class 2 (Master)	27178-4 27179-4
Style A, Option 11	27178-7 27179-7	Style B, Class 2 (Slave)	27178-6 27179-6
Style B, Class 1 (Master)	27178-3 27179-3	Style B, Option 11	27178-8 27179-8

* For complete 2-Lamp units, order 27170.

* For complete 3-Lamp units, order 27175.

