

Approach & Navigational Aids

PAPI

Precision Approach Path Indicator

Compliances:

FAA: AC 150/5345-28 Current Edition: 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. Style B does not include isolation transformers or connector kits, please order those separately.

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 (not included with PAPI unit)
- 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 (not included w/PAPI Unit)
- 50 Hz or 60 Hz Operation
- Remote Control Override
- Indicator Lights:
 - Internal D.C. Power Supply Operation
 - Remote Control Status
 - Tilt Switch Status
 - Photocell Status

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. Above ground mounting hardware is included except 2 inch EMT for the legs. Order baseplates, transformer bases, and all other below ground items separately.

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

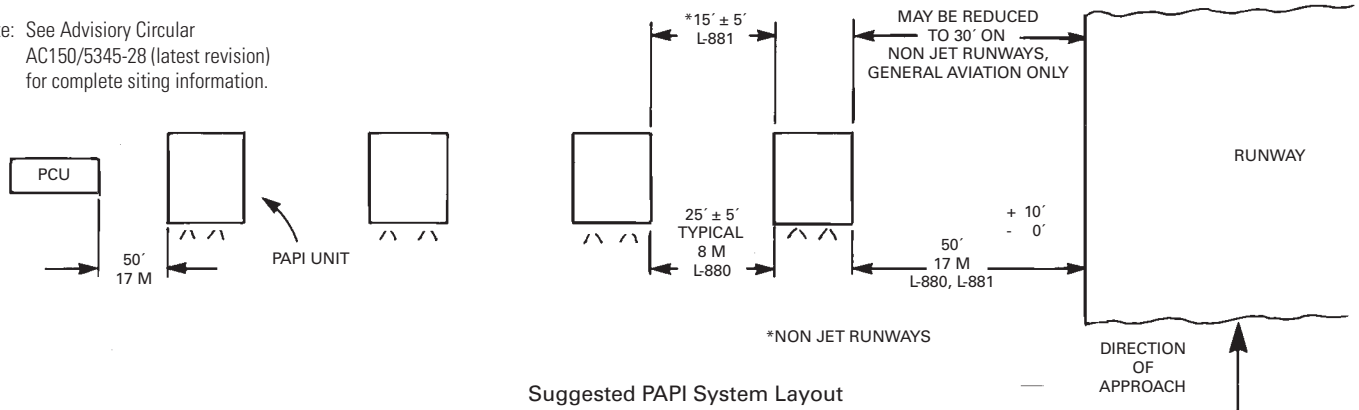
880A2B-2-11 is an ICAO PAPI system. It includes the EMT legs and it does not have tilt switches.

			A		-		-		
Fixture Type:									
880 = 4 Units									
881 = 2 Units									
Model:									
Lamps:									
2 = 2 Lamps per Unit									
3 = 3 Lamps per Unit									
Style:									
A = 220V to 240V									
B = 6.6A									
Temperature Class:									
1 = -35°C									
2 = -55°C									
Options:									
11 = ICAO (No tilt switch, light unit legs included, -55°C operation) (see above example)									
12 = Day operation enabled, night operation on/off interlocked with R/W circuit (Style A Only)									
13 = Day & Night operation on/off interlocked with R/W circuit. (Style A Only)									
16 = Protective lens cover									
21 = Grounded Transformers – For No Tilt Switch units only									
S550 = Painted Stainless Steel PAPI Light Unit Housing									

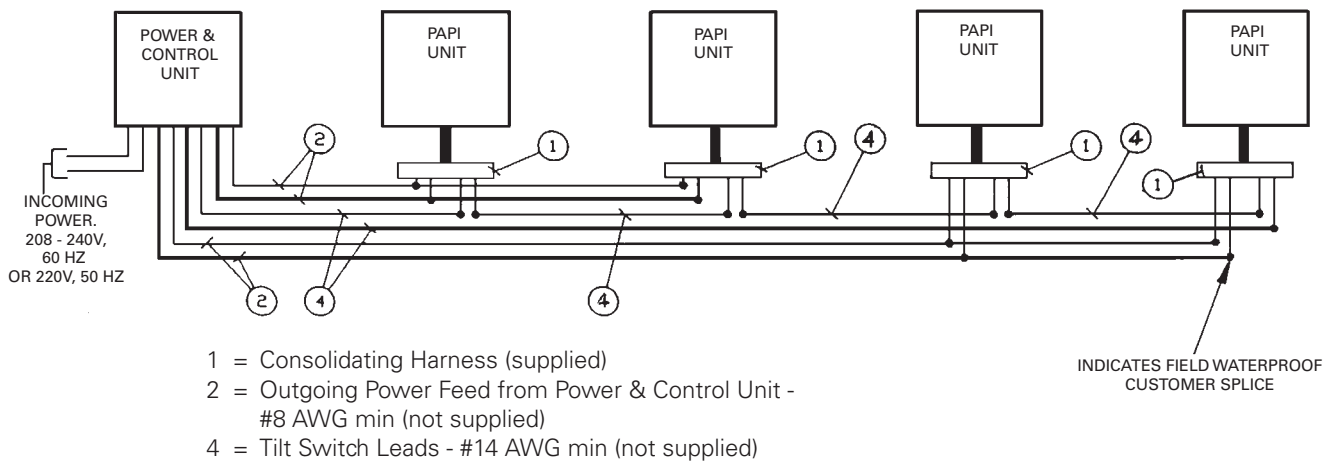
Note: Order one clinometer (aiming device) 25220 separately.

Installation Information

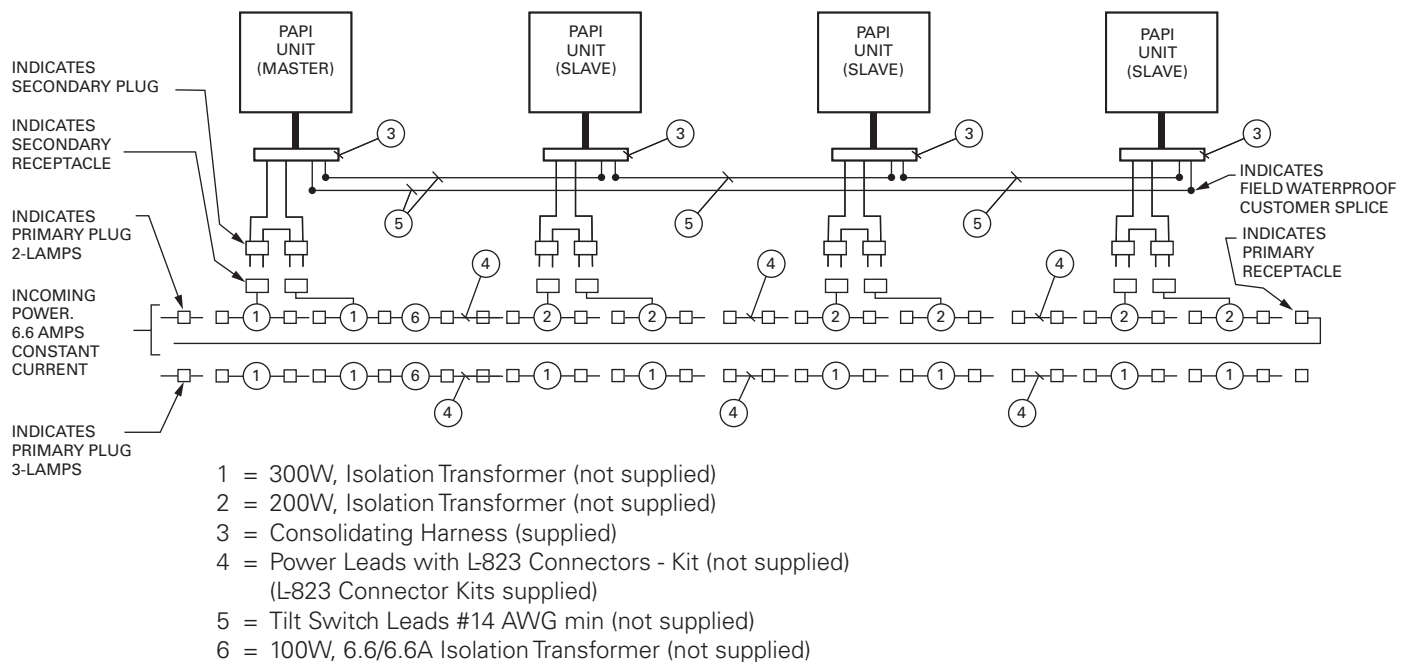
Note: See Advisory Circular
AC150/5345-28 (latest revision)
for complete siting information.



Typical Wiring Diagram: FAA Style A



Typical Wiring Diagram: FAA Style B (2-Lamps) / (3-Lamps)

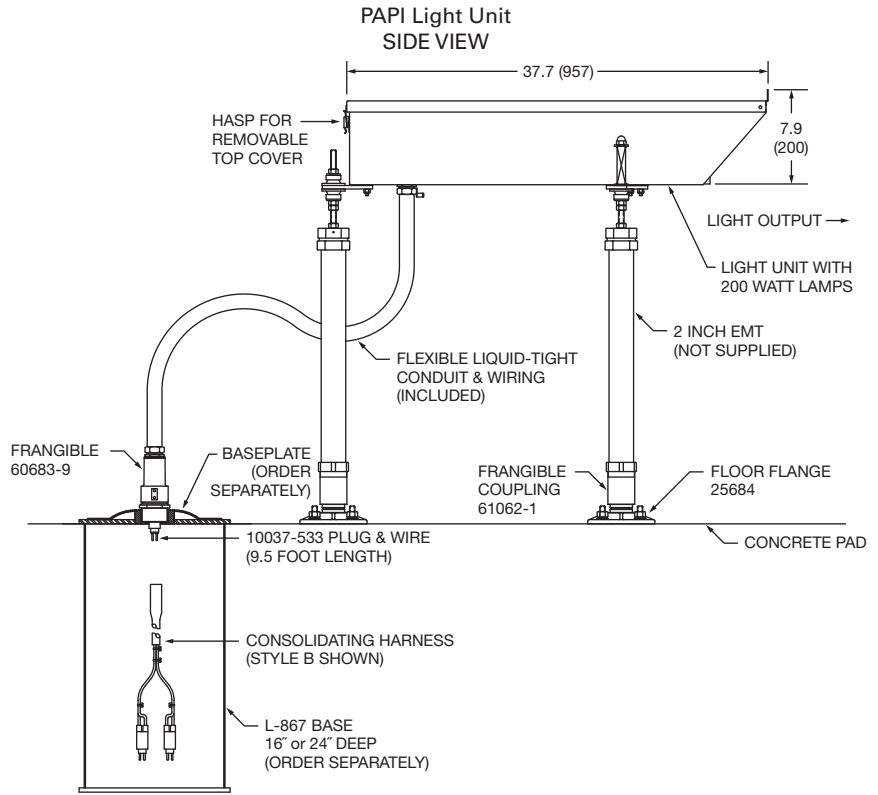
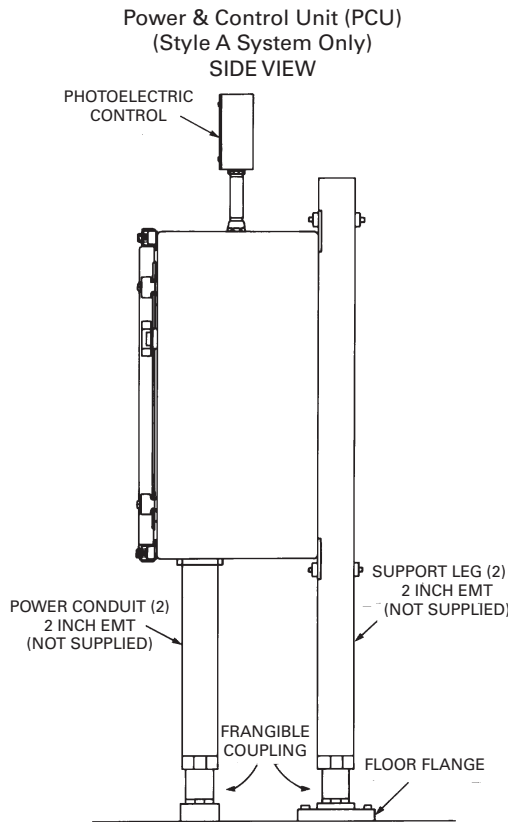


PAPI System Isolation Transformer and Connector Kit Usage Quantity

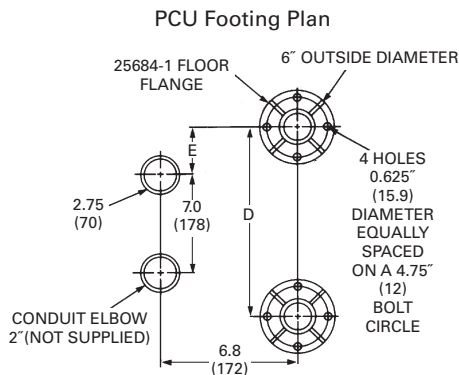
PAPI System Part Number	100W 6.6/6.6A PN: TA10066D-01	200W 6.6/6.6A PN: TA20066D-01	300W 6.6/6.6A PN: TA30066D-01	200W 6.6/6.6A PN: TA20066-01 GRS	300W 6.6/6.6A PN: TA30066-01 GRS	L-823 Connector Kit- 8 AWG PN: 54-D4-D4
881A2B-1 OR -2	—	2	2	—	—	2
881A2B-X -11 OR -20	—	4	—	—	—	2
881A2B-X -21	—	—	—	4	—	2
880A2B-1 OR -2	—	6	2	—	—	4
880A2B-X -11 OR -20	—	8	—	—	—	4
880A2B-X -21	—	—	—	8	—	4
881A3B3-1 OR -2	1	—	4	—	—	2
881A3B-X -11 OR -20	—	—	4	—	—	2
881A3B-X -21	—	—	—	—	4	2
880A3B-1 OR -2	1	—	8	—	—	4
880A3B-X -11 OR -20	—	—	8	—	—	4
880A3B-X -21	—	—	—	—	8	4

Note: This table pertains to 6.6A circuits only, Consult factory for 20A requirements

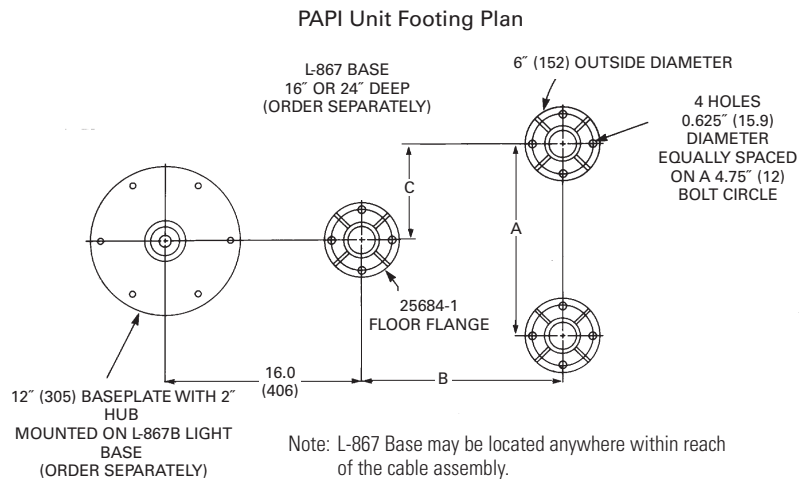
Outline Drawings



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



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



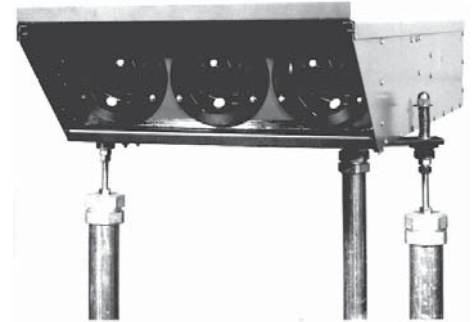
Note: L-867 Base may be located anywhere within reach of the cable assembly.

Footling 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 (2)* 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.

*Each Unit



3-Lamp Light Unit

Accessories

Description	Catalog Number	Shipping Weight lb.	kg.	Shipping Volume cu. ft.	cu. m.
Clinometer	25220				
Baseplate, 2" Hub	AP1932	8	3.6	0.14	0.004
Tilt Level	25057				

Renewal Parts

Description	Part Number	Description	Part Number
PAPI UNIT		Lamp 200W (replaces 20531)	10047-2896
Power Entry-Frangible Coupling (1 per Unit)	27225	Lamp Socket	40749
Leg-Frangible Coupling (3 per Unit)	61062-1	Plug 4-Pin with 4-Conductor wire 9.5"	
Receptacle 4 P-AN with 4-Conductor 2'	27195	(Mates to 27195)	10037-533
Consolidating Harness		Red Filter	27069
Style A (Mates to 10037-533)	27194	Tilt Switch (Class 1)	25225-1
Consolidating Harness		Tilt Switch (Class 2, Style A)	25225-4
Style B - FAA (2-Lamp)	27068-1	Tilt Switch (Class 2, Style B)	25225-3
Consolidating Harness		Tilt Switch Control Board (2-Lamp)	27123-1
Style B - FAA (3-Lamp)	27068-3	Tilt Switch Control Board (3-Lamp)	27123-2
Consolidating Harness		Tilt Switch Control Board (3-Lamp)	27123-3
Style B - ICAO	27068-2	Isolation Transformer	See Transformer Section
Floor Flange (3 per Unit)	25684-1		
PCU		Power & Control Unit (PCU)	
Floor Flange (2 per PCU)	25684-1	PC Board Standard with no Options	27175-1 (Master) 27175-2 (Slave)
Frangible Coupling (4 per PCU)	61062-1		
Fuse F1	10047-1005	Power & Control Unit (PCU) PC Board with Options "12"	27175-5 (Master) 27175-6 (Slave)
Fuse F2	10047-1143		
Lightning Arrestor	10047-885	Relay K1,K2	10047-2901
Photocell Assembly	27045	Transformer	See Transformer Section
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.

www.crouse-hinds.com/airportlighting

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