

LED PAPI Series 3

LED Precision Approach Path Indicator

The Avlite LED PAPI Series 3 is a highly efficient Precision Approach Path Indicator that uses LEDs as a light-source to provide low maintenance, low power consumption, and high levels of reliability. The light head unit operates from 24VDC for energy efficiency and increased safety, and can be supplied with optional solar power supplies, AC input or traditional CCR. The LED PAPI Series 3 is also available with durable, marine grade finishes to withstand prolonged exposure in environments with high humidity and salinity.

Patented LED Optics

Innovative optics achieve the industry's lowest power consumption, uniform intensity, and sharpest red/white transition for critically accurate approach slope information to the pilot.

Field Proven Design

The Avlite LED PAPI was developed by Laser Guidance Inc, a United States designer and manufacturer of high precision aviation lighting products. Now in its 3rd generation, over 100 systems have been deployed globally in regions including the Americas, Europe, Middle East, Asia and Africa.

Permanent or Portable Operations

Available with permanent frangible or temporary mounting legs, the PAPI is designed to support various usage conditions.

Designed for Commercial or Military Applications

The Avlite LED PAPI is one of the only PAPIs on the market capable of supporting visual and infrared operational states within the same optic. Switchable by ground operators, the visual PAPI allows pilots to identify approach slope information using traditional means of WHITE/RED light combinations.



Cost Effective

- Low power consumption
- Low ongoing maintenance costs

Optional Add Ons

- Solar power supplies
- Mounting solutions
- Marine grade stainless steel

Applications

- Airfield lighting
- Helipad lighting (APAPI)

High Performance

- Fully integratable into an Avlite runway system
- On demand operation

Reliable

- No bulbs blown – ever
- Latest LED technology
- No moving parts

Compliance

- Photometrically compliant to ICAO, FAA, STANAG, DGAC and UFC standards

Technical Specifications .*

Optics

High power LEDs with proper heat management ensures stable photometrics for life of product

FAA L-880/881 & E-3007 (2 & 4 LHA) compliant, Photometrics and Chromaticity

ICAO Annex 14 PAPI (2 & 4 LHA) & APAPI (2 LHA) compliant STANAG 3316 PAPI (2 & 4 LHA) & APAPI (2 LHA) compliant UFC 3-535-01 (4 LHA) compliant

Optical glass lens

| Physical Characteristics Per LHA Only | Permanent | Portable |
|---------------------------------------|-------------|--|
| Height (mm/inches) | 306 / 12.06 | Extended: 494 / 19.45 Collapsed For Shipment: 360 / 14.2 |
| Width (mm/inches) | 324 / 12.75 | 335 / 13.22 |
| Length (mm/inches) | 682 / 26.87 | 672 / 26.47 |
| Weight (kg/lbs) | 8.07 / 17.8 | 11.34 / 25 |

Electrical Characteristics

Current Draw PAPI: 216W

Power Options

Solar Station Solar panels, mounting hardware, batteries, enclosures, air transportable container, AC input for backup

Generator Kit Gas or diesel generator, AC output for charging and back up power

Battery Kit Batteries & enclosures, AC input for charging and back up power

AC Only 100-240VAC 50/60 Hz, 3 & 5 step current input

CCR 3 & 5 step current input (100w transformer per LHA)

Control Options

Wired Wired relay control, powerline control

Wireless 2.4 GHz Mesh Network

Photocell Automatic intensity control day & night

Construction

Epoxy painted aluminum chassis with aviation orange standard, yellow and other colors available

Stainless steel & anodized aluminum hardware

Integrated digital level

Marine grade option: Non-corrosive stainless steel mounting bars and power control unit

Temperature

-67 to 131 °F (-55 to +55 °C) - Ambient

-67 to 176 °F (-55 to +80 °C) - Storage

Wind Loading

100 mph (45 m/s)

Ingress

NEMA 4 & EN 60529 IP 55

Intellectual Property

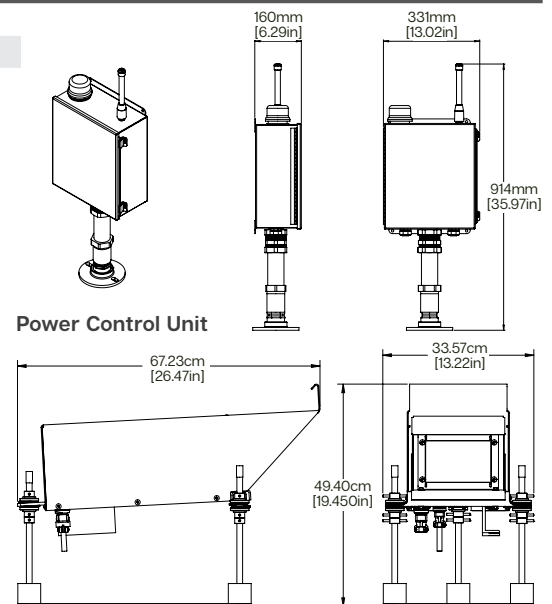
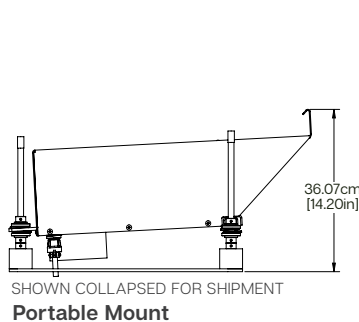
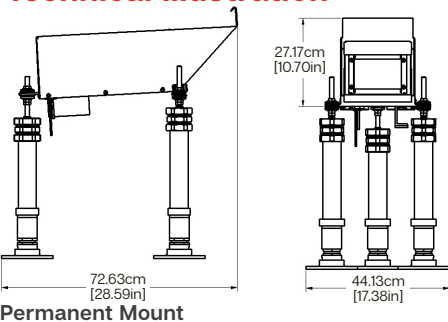
Patents U.S. Patent No. US 9,863,601 B2

Trademarks AVLITE® is a registered trademark of Sealite Pty Ltd

Standard Configurations

| Model | Size | Mounting | Output | Power | Control |
|-------------------|----------------|-----------|--------------|---------------|-----------|
| PAPI | Standard 2 LHA | Permanent | Visible | Solar Kit | Wired |
| | Standard 4 LHA | Portable | Visible / IR | Generator Kit | Wireless |
| Marine Grade PAPI | | | | Battery Kit | Photocell |
| | | | | AC | |

Technical Illustration



Power Control Unit

SHOWN COLLAPSED FOR SHIPMENT
Portable Mount

Specifications subject to change or variation without notice. *Subject to standard terms and conditions



Photometric Chart

| White Requirements | | Red Requirements | |
|--------------------|-------------|------------------|-------------|
| Beam Location | FAA Minimum | Beam Location | FAA Minimum |
| | 5000 cd | | 2500 cd |
| | 8000 cd | | 4000 cd |
| | 14000 cd | | 7000 cd |
| | 20000 cd | | 10000 cd |
| | 30000 cd | | 15000 cd |

| | | | | | |
|--------|------------------|------------------|----|---------------|------|
| Sample | CRT181061023-001 | Powered By | DC | | |
| Test | Initial | Transformer Make | NA | Voltage (VDC) | 24.0 |
| Lamp | LED | Transformer Size | NA | Current (ADC) | 2.37 |

| Vertical Degrees | Horizontal (degrees) | | | | | | | | | | | | | | | | | | | | | | |
|------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -11.0 | -10.0 | -9.0 | -8.0 | -7.0 | -6.0 | -5.0 | -4.0 | -3.0 | -2.0 | -1.0 | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 9.0 | 10.0 | 11.0 |
| 5.0 | 3493 | 5025 | 6556 | 8204 | 9862 | 11377 | 12784 | 13480 | 13890 | 14509 | 14889 | 14056 | 13665 | 13667 | 13010 | 11515 | 10578 | 9788 | 8833 | 8007 | 7108 | 5984 | 4904 |
| 4.5 | 3941 | 5500 | 7502 | 9609 | 11666 | 13510 | 15256 | 16236 | 16981 | 17780 | 18151 | 17034 | 16522 | 16470 | 15554 | 13655 | 12373 | 11365 | 10204 | 9223 | 8292 | 6976 | 5705 |
| 4.0 | 5020 | 6679 | 8964 | 11375 | 13844 | 15977 | 17907 | 19314 | 20307 | 21186 | 21574 | 20246 | 19592 | 19294 | 18016 | 15794 | 14300 | 12970 | 11603 | 10566 | 9520 | 8138 | 6670 |
| 3.5 | 5745 | 7729 | 10189 | 12826 | 15611 | 18143 | 20375 | 22133 | 23389 | 24444 | 25062 | 23562 | 22490 | 22160 | 20602 | 18175 | 16253 | 14739 | 13204 | 11912 | 10647 | 9337 | 7747 |
| 3.0 | 6689 | 8975 | 11794 | 14827 | 17888 | 20492 | 23053 | 25201 | 26781 | 27926 | 28641 | 26967 | 25387 | 24797 | 23253 | 20793 | 18550 | 16852 | 15308 | 13992 | 12729 | 11435 | 9671 |
| 2.5 | 7326 | 9842 | 13040 | 16484 | 19846 | 22526 | 25053 | 27160 | 28948 | 30195 | 31396 | 30467 | 29130 | 28449 | 26883 | 24064 | 21398 | 19494 | 17806 | 16088 | 14655 | 13117 | 11045 |
| 2.0 | 7952 | 10748 | 14284 | 17968 | 21566 | 24465 | 27032 | 28693 | 30174 | 31691 | 33575 | 33269 | 32375 | 31685 | 29897 | 26732 | 23692 | 21546 | 19737 | 17951 | 16234 | 14395 | 12084 |
| 1.5 | 8153 | 11211 | 14859 | 18786 | 22557 | 25684 | 28276 | 29794 | 31236 | 32700 | 34862 | 35110 | 34405 | 33705 | 31847 | 29030 | 25840 | 23439 | 21516 | 19585 | 17809 | 15662 | 13061 |
| 1.0 | 8151 | 11240 | 14920 | 18711 | 22520 | 25783 | 28510 | 30116 | 31477 | 33006 | 34795 | 34957 | 34484 | 33912 | 32315 | 29786 | 26665 | 24387 | 22608 | 20775 | 19041 | 16664 | 13600 |
| 0.5 | 7864 | 10729 | 14245 | 17803 | 21112 | 23933 | 26556 | 28392 | 30206 | 31732 | 33272 | 33938 | 33839 | 33346 | 32217 | 30098 | 27017 | 24839 | 23313 | 21537 | 19516 | 17096 | 13803 |
| 0.0 | 4582 | 6179 | 8047 | 9740 | 11326 | 12836 | 14277 | 15688 | 16903 | 18835 | 20214 | 20980 | 20965 | 21202 | 20563 | 18959 | 17099 | 15411 | 13835 | 12292 | 10992 | 9631 | 8053 |
| -0.5 | 4423 | 5704 | 7242 | 8808 | 10427 | 11844 | 12962 | 14034 | 14920 | 15769 | 16655 | 16239 | 18793 | 19077 | 18710 | 17838 | 16765 | 15445 | 14328 | 12978 | 11514 | 9949 | 8299 |
| -1.0 | 4125 | 5516 | 6908 | 8551 | 10283 | 11747 | 12929 | 14017 | 14853 | 15649 | 16667 | 17749 | 18168 | 18396 | 18039 | 17178 | 15983 | 14792 | 13751 | 12349 | 10804 | 9287 | 7720 |
| -1.5 | 4195 | 5488 | 7019 | 8701 | 10416 | 11945 | 13306 | 14493 | 15619 | 16692 | 17920 | 18999 | 18842 | 18508 | 18030 | 17078 | 15901 | 14635 | 13567 | 12120 | 10580 | 9136 | 7561 |
| -2.0 | 4415 | 5944 | 7472 | 9189 | 10826 | 12404 | 13881 | 15258 | 16623 | 17826 | 18896 | 19674 | 19312 | 18725 | 17518 | 15918 | 14525 | 13523 | 12169 | 10778 | 9261 | 7587 | |
| -2.5 | 4429 | 5956 | 7685 | 9444 | 11095 | 12757 | 14358 | 15796 | 17141 | 18280 | 19293 | 20291 | 20112 | 19741 | 19203 | 18030 | 16352 | 14766 | 13601 | 12307 | 10909 | 9380 | 7704 |
| -3.0 | 4258 | 5987 | 7716 | 9617 | 11298 | 12939 | 14495 | 15901 | 17253 | 18351 | 19290 | 20207 | 19944 | 19497 | 18927 | 17708 | 15941 | 14322 | 13195 | 11954 | 10642 | 9207 | 7602 |
| -3.5 | 3852 | 5377 | 7129 | 8947 | 10565 | 12130 | 13625 | 14902 | 16120 | 17195 | 18119 | 19058 | 18630 | 17991 | 17374 | 16121 | 14470 | 13033 | 12019 | 10970 | 9836 | 8551 | 7088 |
| -4.0 | 3368 | 4665 | 6207 | 7760 | 9174 | 10555 | 11824 | 12918 | 13968 | 14899 | 15656 | 16282 | 15838 | 15170 | 14522 | 13334 | 11951 | 10882 | 10090 | 9241 | 8317 | 7210 | 5901 |
| -4.5 | 2733 | 3858 | 4983 | 6265 | 7392 | 8553 | 9597 | 10445 | 11292 | 11995 | 12491 | 12899 | 12400 | 11847 | 11279 | 10338 | 9275 | 8529 | 7932 | 7270 | 6565 | 5589 | 4612 |
| -5.0 | 2139 | 2900 | 3844 | 4839 | 5767 | 6673 | 7465 | 8087 | 8720 | 9245 | 9521 | 9661 | 9211 | 8681 | 8237 | 7590 | 6887 | 6404 | 5977 | 5465 | 4895 | 4158 | 3417 |

Note: All measurements are in Candelas. Conditional formatting will turn text red to indicate that a measured value is outside of required limits.

How to Order

AV-PAPI Precision Approach Path Indicator

AV-PAPI - [?] - [??] - [??] - [??]* - [?]

Product No.:

Standard/Size:

- A = ICAO Abbreviated-PAPI 2-LHA
- 2 = FAA 2-LHA
- 4 = FAA/ICAO 4-LHA

Mounting:

- PO = Permanent
- P1 = Portable

Input Voltage:

- UM = 100-240VAC
- 24 = 24VDC
- 66 = 6.6A Constant Current

Options:

- RF = Radiofrequency Control
- HL = Heated Lens
- TS = Tilt Switch
- MG = Marine Grade Components

Color:

- 0 = FAA Orange
- 1 = ICAO Yellow
- 2 = Marine Grade Orange
- 3 = Marine Grade Yellow

*Note: Multiple/all options are available together.