

i2Systems™

Simply
Advanced.™

★★★★★
MADE IN THE
USA



**WIDE RANGE OF
BEZEL OPTIONS**

Round, Square,
Double, Triple & Swivel
Options
Spring Mount
Installation

PERFECT
HALOGEN
REPLACEMENT
SIMPLE
TO INSTALL



Apeiron™ A1110

DIMMABLE MARINE-GRADE LED DOWNLIGHT

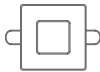
Since its introduction nearly a decade ago, Apeiron is the undisputed go-to marine LED down light. Apeiron fixtures offer the perfect blend of technical sophistication and elegance. Now with a swivel option.



3.15" Round



3.15" Square / Round



3.15" Square / Square



1.24" Deep



6.30" Double



9.45" Triple



3.25" Swivel



1.63" Deep Swivel

FEATURES

Advanced Optics

Even light, with no LED "dots" or pixilation, provides the halogen look without the heat and 1/5th the power load.

Dimmable

Using our LightLink™ Dimmers, experience simple LED dimming at the push of a button.

Rugged & Waterproof

With stainless steel construction and a PVD Titanium-Coated or Mil-Spec Powder-Coated stainless steel trim bezel, expect industry-leading fit and finish that will last. IP67 waterproof rated*.

Simple to Install

Convenient spring clip design makes installation fast and easy.

*IP67 rated. Not for use in submersible applications.



Typical Applications

- General Lighting
- Soffit
- Pilot House
- Mezzanine
- Hardtop

Quick Specs

4.5W	Power
106	Lumen Output Typ.
120°	Beam Angle Fixed
60°	Beam Angle Swivel

LED Color

- 3000°K Warm White
- 6500°K Cool White

Finish Color

- Polished Chrome (PVD TITANIUM)
- Polished Gold (PVD TITANIUM)
- Brushed Nickel (PVD TITANIUM)
- White (MIL-SPEC POWDER COATED)
- Off-White (MIL-SPEC POWDER COATED)
- Black (MIL-SPEC POWDER COATED)

The Apeiron is an IP67 recessed marine-grade LED downlight. Launched in 2006, the Apeiron is a proven workhorse, widely used in interior and exterior marine general lighting applications. With stainless steel construction and the option for either titanium-coated PVD or mil-spec powder-coated finish, expect a premium finish that will withstand the elements of time.

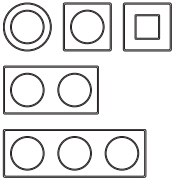
CUSTOMER COMPANY	CUSTOMER CONTACT
P.O.#	CUSTOMER PHONE #
SHIPPING ADDRESS	

FIXTURE BUILDER

A1110Z -

FIXTURE TYPE

Apeiron



FINISH

PVD Titanium Coated

- 1 Polished Chrome
- 2 Polished Gold
- 4 Brushed Nickel

Powder Coated

- 3 White
- 5 Off-White
- 6 Black

BEZEL SHAPE

- 1 Round
- 2 Square / Round
- 4 Square / Square
- 5 Double
- 6 Triple
- 8 Round Swivel

LED COLOR

- AAH Cool White 6500°K
- CAB Warm White 3000°K

ACCESSORIES

DIMMING CONTROL

LIGHTLINK

- LL-101** Momentary Switch Dimmer
- LL-105-R** 0-10V Bridge & Dimmer

The LightLink LL-101 Dimmer dims up to 20 Apeiron fixtures. The LL-105-R dims up to 50.

See below for additional dimming information and wiring diagrams.

TRIM RING EXTENDERS

PN FINISH

- 3120177-11** Chrome
- 3120177-21** Gold
- 3120177-31** White
- 3120177-41** Nickel
- 3120177-51** Off-White
- 3120177-61** Black

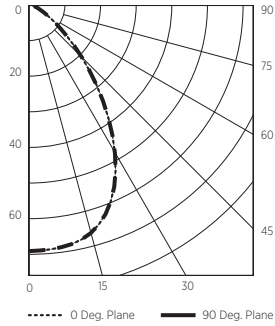
Extends round bezel from 3.15" to 3.75" diameter.

QUICK SPECS

Input Voltage	9-30V DC
Input Power	4.5 Watts
Lumens	106 lms typ. @ 3000°K
Efficiency	31 lms / W typ. @ 3000°K
Beam Angle	120° Fixed, 60° Swivel
Operating Temp	-20°C to 40°C
Max. Case Temp	50°C
IP Rating	IP67
Wiring	18" Twisted 18 AWG
Housing	Stainless Steel Trim, Anodized Aluminum Housing
Lens	Tempered Glass w/ Diffuser

PHOTOMETRICS

APEIRON (A1110Z-41CAB) RESULTS



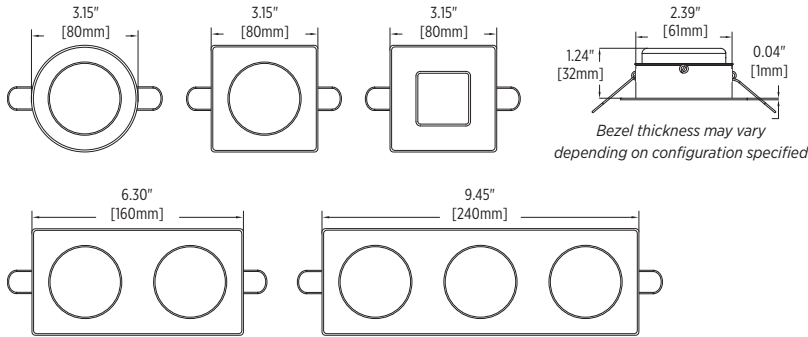
Mounting Height	fc @ Center Beam	Diameter of Lighted Plane
1.0 ft	69.0 fc	2.0 ft
2.0 ft	12.7 fc	4.1 ft
3.0 ft	7.7 fc	6.1 ft
4.0 ft	4.3 fc	8.2 ft
5.0 ft	2.8 fc	10.2 ft
6.0 ft	1.9 fc	12.3 ft
7.0 ft	1.4 fc	14.3 ft
8.0 ft	1.1 fc	16.3 ft

Multiplier Table	3000°K	6500°K
Apeiron		x 1.2

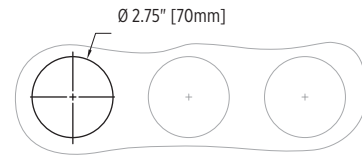
All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

for lux, multiply by 10.8

DIMENSIONS

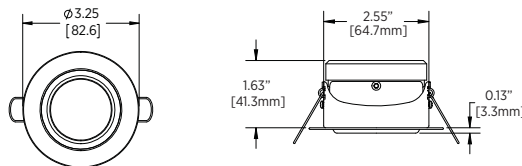


MOUNTING

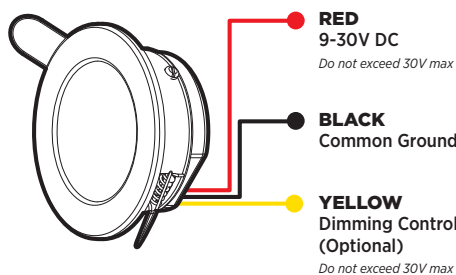


For Double or Triple applications, bore the appropriate number of holes 3.15" apart on center.

SWIVEL OPTION



WIRE FUNCTION



LIGHTLINK See wiring examples below.

Using 3rd Party Multiplex & PWM Dimmers:

This light fixture is compatible with i2Systems LightLink™ Dimmers and 3rd party PWM type dimmers.

To use a 3rd party PWM dimmer, drive the Yellow Dimming Control Wire using a Pulse Width Modulation (PWM) Controller. By driving the Yellow Dimming Control Wire Low to DC Common, the Fixture turns off. By driving the Yellow Dimming Control Wire High to DC Positive (i.e. +24V), or by allowing the wire to Float (no connection), the Fixture turns on to 100%.

The PWM signal must be a Square Wave at a fixed frequency and a maximum voltage of 30V DC. Frequency range may be between 100Hz and 300Hz (user selected). A wiring example is shown on the last page of this spec sheet.

PROTECTION FEATURES

Active Thermal™

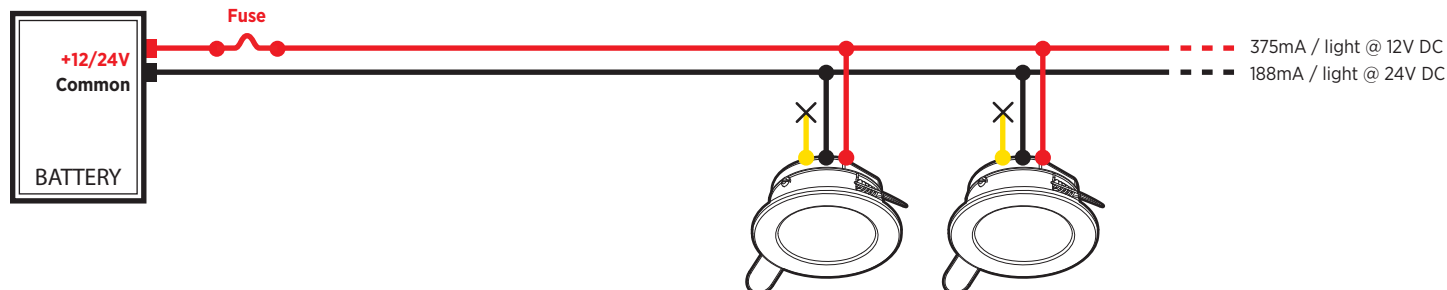
Active Thermal dims the Apeiron to help reduce the risk of overheating.

Electrical Protection

- Dim Line Protected to 30V DC
- Transient Protection
- Reverse Polarity Protection
- Auto-Reset Fuse

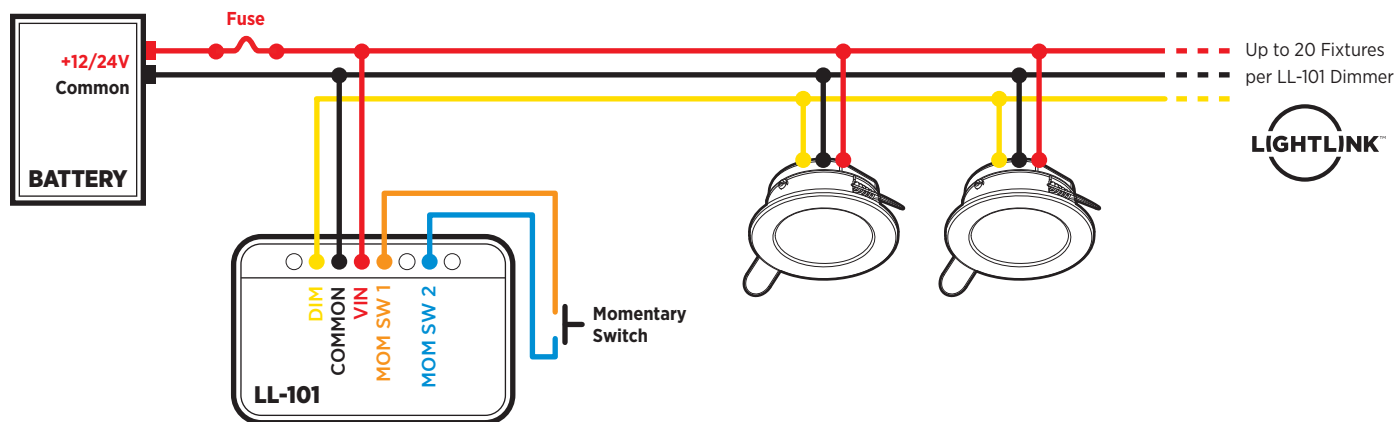
WIRING EXAMPLE

12/24V DC NO DIMMING



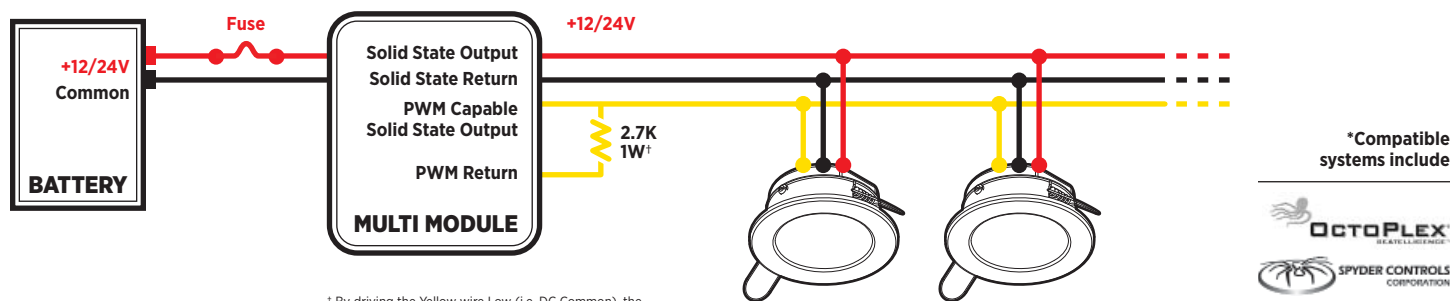
WIRING EXAMPLE

12/24V DC PUSH BUTTON SWITCH DIMMING



WIRING EXAMPLE

12/24V DC 3RD PARTY MULTIPLEX DIMMER*



* By driving the Yellow wire Low (i.e. DC Common), the Fixture turns off. Many Multiplex type systems were originally designed for halogen lamps and do not drive Low, in which case in this example a 2.7K, 1 Watt Pull Down Resistor pulls down the Yellow Dimming Line to DC Common when the PWM is not driven High (thus shutting off the Fixtures).

EmpirBus™
 VANTAGE