

# STARMED™ DOS+1 SERIES



PROJECT: \_\_\_\_\_  
 TYPE: \_\_\_\_\_  
 PRODUCT: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_

## PRODUCT FEATURES

- Intended for Patient Rooms, Skilled Nursing, Examination Rooms, and more
- Multi-function 3-compartment Exam, Ambient, Reading functions, available in 2x2 and 2x4
- Recessed Grid and Flange installation
- This product was Made in America and complies with the Buy American Act (BAA), and the Build America, Buy America Act (BABAA)



SMDOS Series

## ORDERING INFORMATION

Example: SMDOSG24-HC/ICA-L340-L240-RL-FA-90C-UN-DMI

| SMDOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                    |                                                                                 |                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mounting<br>G = Grid<br>F = Flange | Size*<br>22 = 2x2<br>24 = 2x4<br><br>*Nominal Size. Dimensional Data on Page 2. | Housing<br>HC = 20Ga. CRS Painted<br>HP = 20Ga. SS Painted<br>HA = 16Ga. Alum. Painted                                                                                                                                                                           | Frame Lens (w/ gasket)*<br>blank = No Lens<br>A = .125 Clear Poly.<br>1 = .187 Clear Poly.<br><br>*If no frame is selected, no frame lens will be provided.                                                                                                                                                                                                                                                                                                    | Ambient Lumen Output*<br>L1 = Low<br>L2 = Medium<br>L3 = High<br><br>*Subject to change. Performance data on Page 3. Ambient lens is a White. Poly. | Ambient Color Temp.<br>35 = 3500K<br>40 = 4000K<br>50 = 5000K<br>TW1 = Tunable White 2700K to 5000K*<br>TW2 = Tunable White 2700K to 6500K*<br><br>*Available for ambient function.<br>*BIOS drivers only work with BIOS LEDs. Must select STC or DMB option, otherwise leave field blank and standard 0-10V driver will be provided.<br>**0-10V with Dimming from 1%-100%.<br>***0-10V Intensity Dimming to 1% and Dim-to-Dark capabilities. | BIOS Options:*<br>BIOS Color Temp.**<br>B30 = 3000K<br>B35 = 3500K<br>B40 = 4000K<br><br>BIOS Tunable CCT**<br>BTW1 = 2700K-3500K<br>BTW2 = 2700K-4000K |
| Exam Lumen Output<br>L1 = Low<br>L2 = High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                    |                                                                                 | Exam Color Temp.*<br>35 = 3500K<br>40 = 4000K<br>50 = 5000K<br><br>*Selected CCT will be the same for ambient and exam functions.                                                                                                                                | Reading Light<br>blank = None<br>RL = 2 LED Lights*<br>L1 = Low<br>L2 = High<br><br>*3000K non-dimmable swivel puck lights.                                                                                                                                                                                                                                                                                                                                    | Exam Lens<br>CA = Clear Ribbed Acrylic<br>FA = Frosted Ribbed Acrylic                                                                               | CRI<br>80C = 80 CRI<br>90C = 90 CRI                                                                                                                                                                                                                                                                                                                                                                                                           | Voltage<br>12 = 120V<br>27 = 277V<br>UN = Universal (120V-277V)                                                                                         |
| Driver<br>DMI = 0-10V Dimming to 1%<br><br>Tunable White Driver*:<br>TWD = 2-Channel 0-10V DALI8<br>DALI8 = 1-Channel DALI8<br><br>BIOS Driver**:<br>STC = Static BIOS***<br>DMB = Dynamic BIOS Dimming****<br><br>*Tunable White Driver requires choice of TW1 or TW2 in Color Temp. column.<br>**BIOS drivers only work with BIOS LEDs. Must select STC or DMB option, otherwise leave field blank and standard 0-10V driver will be provided.<br>***0-10V with Dimming from 1%-100%.<br>****0-10V Intensity Dimming to 1% and Dim-to-Dark capabilities. |                                    |                                                                                 | Control<br>LV3 = Dimming Low Voltage Controller*<br><br>*LV3 controls ambient function with dimming and on/off reading function. Exam and Night Light (if specified) are non-dimming and provided on separate line voltage circuits. N/A with emergency battery. | Options<br>FZ1 = Fuse (120V)<br>FZ2 = Fuse (277V)<br>RF = (RIF) Radio Interference Filter<br>AML = Antimicrobial Lens (Ambient and Exam)*<br>LN = LED Night Light**<br><br>*N/A with frame.<br>**3500K non-dimming Night Light with integrated switch allows light levels at 100%, 70%, 40% and 10%. Located in Ambient compartment. N/A with High Ambient Lumen Output (L3).<br>***Illuminate Ambient compartment. Integral test switch located on reflector. |                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                         |



New Star Lighting

2225 W Pershing Rd, Chicago, IL 60609  
 (773) 847-1400  
[www.newstarlighting.com](http://www.newstarlighting.com)

Specifications and dimensions are subject to change without notice. For additional options and dimensional details, please consult your New Star Lighting representative.

## SPECIFICATIONS

**HOUSING:** 20-Gauge formed cold rolled steel housing seam welded and ground smooth. Stainless steel or aluminum options available. Optional inset frame secured to housing with hinge and features clear polycarbonate lens for easy cleaning.

**LENS:** Inner Ambient lens is .125" white polycarbonate. Exam inner lens is available in clear ribbed acrylic or white frosted ribbed acrylic (recommended). If Outer frame lens is ordered, it is clear polycarbonate. Frame lens gasket standard.

**LED:** Ambient and exam compartments available in three color temperatures 3500K, 4000K and 5000K with maximum 3-step MacAdam variation allowance. Tunable White also available, from 2700K - 5000K or 2700K - 6500K. Optional reading lights are non-dimmable and 3000K. Minimum 50,000 hours with 70% lumen maintenance in a 25°C ambient temperature environment, compliant with IES LM-80 testing standards.

Optional BIOS® SkyBlue® circadian solutions to produce the healthy "blue sky" light signal with blue spectrum peak at 490nm+ for circadian entrainment. Bio-Dimming™ reduces CCT by 2700K.

**ELECTRICAL:** 120-277VAC 50/60HZ electrical input high power factor electronic, constant current driver (<20% THD, >0.90 PF). Standard 0-10V dimming with 1-100% range for ambient lighting.

### OPTIONAL TUNABLE WHITE DRIVERS:

**DALI8** - DALI Type 8 (One DALI Address)

**TWD** - Two Channel 0-10V dimming; one channel for brightness, one channel for CCT

### OPTIONAL BIOS DRIVER OPTIONS:

**STC** - BIOS control 0-10V with Dimming from 1%-100% and Dynamic Bios Dimming with 0-10V Intensity Dimming to 1% and Dim-to-Dark capabilities.

**DMB** - Dynamic BIOS control 0-10V with dynamic spectrum and BIOS SkyBlue® with Bio-Dimming™, which changes a spectral qualities by removing the SkyBlue component when dimming from 100%-51%, while light output remains relatively constant; CCT will decrease approximately 500K through bio-dimming; dimming from 50% to 1% will then reduce light output.

**LOW VOLTAGE CONTROL:** The Low Voltage Control (LVC3) option controls ambient function with dimming, and reading is non-dimming (on/off). The Exam and Night Light functions are on separate line voltage circuits. The Exam and Night Light functions are on separate line voltage circuits; the nightlight LED board has (4) settings that are field selectable. The exam is typically wired to a wall switch (by others) and is dimmable. Other configurations are available - consult factory. Leads are factory labeled for field installation. Controls and any additional accessories by others.

**FINISH:** White antimicrobial polyester powder coat finish following multi-stage iron phosphate pretreatment.

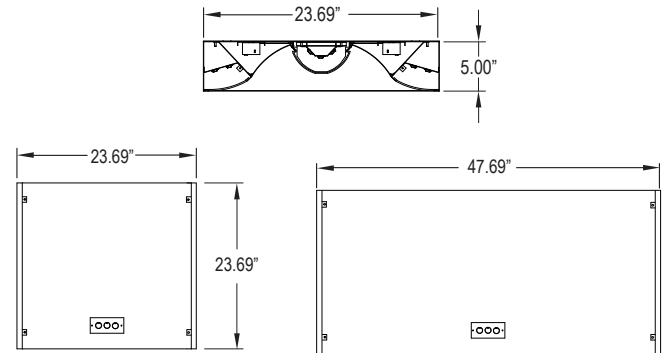
**INSTALLATION:** Recessed Grid and Flange mounting available. Flange fixtures supplied with yokes for installation. Hardware by others.

**WARRANTY:** 5 Year Warranty.

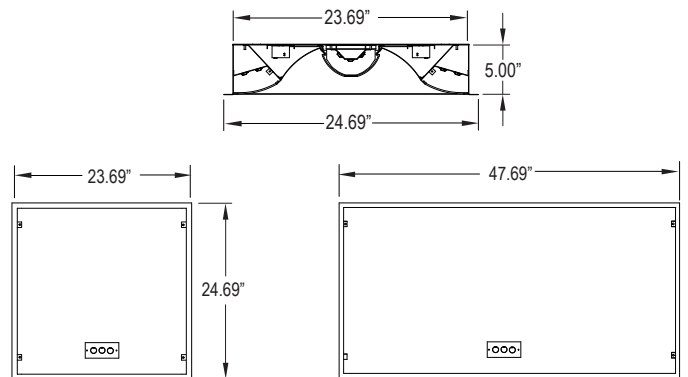
**LABEL:** Fixture is certified Damp Location to UL standards by Intertek Testing Laboratories. This product is Made in America and complies with Buy American Act (BAA), and the Build America, Buy America Act (BABAA).

## DIMENSIONAL DATA

GRID:



FLANGE:



### Flange Recommended Opening:

22: 24-1/16" x 23-1/8"

24: 24-1/16" x 47-1/8"



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## PERFORMANCE DATA\*

\*LEDs are frequently updated therefore values may change without notice.

| MODEL   | FUNCTION      | OUTPUT      | COLOR TEMP | LUMENS DELIVERED | EFFICACY (lm/w) | INPUT POWER (W) |
|---------|---------------|-------------|------------|------------------|-----------------|-----------------|
| SMDOS22 | Ambient       | L1 = Low    | 4000K      | 1265             | 101             | 12.5            |
|         |               | L2 = Medium | 4000K      | 2525             | 101             | 25              |
|         |               | L3 = High   | 4000K      | 3790             | 101             | 37.5            |
|         | Exam          | L2 = High   | 4000K      | 5500             | 110             | 50              |
|         | Reading Light |             | 3000K      | 1442             | 103             | 14              |
| SMDOS24 | Ambient       | L1 = Low    | 4000K      | 2525             | 101             | 25              |
|         |               | L2 = Medium | 4000K      | 5050             | 101             | 50              |
|         |               | L3 = High   | 4000K      | 7575             | 101             | 75              |
|         | Exam          | L1 = Low    | 4000K      | 5500             | 110             | 50              |
|         |               | L2 = High   | 4000K      | 11000            | 110             | 100             |
|         | Reading Light |             | 3000K      | 1442             | 103             | 14              |

## THIS ONLY PERTAINS TO BIOS PERFORMANCE DATA\*

\*Data is with 80 CRI chip. LEDs are frequently updated therefore values may change without notice.

| MODEL                                                                               | FUNCTION | OUTPUT      | LUMENS DELIVERED | EFFICACY (lm/w) | INPUT POWER (W) |
|-------------------------------------------------------------------------------------|----------|-------------|------------------|-----------------|-----------------|
|   | Ambient  | L1 = Low    | 1092             | 84              | 13              |
|                                                                                     |          | L2 = Medium | 2184             | 84              | 26              |
|                                                                                     |          | L3 = High   | 3360             | 84              | 40              |
|  |          | L1 = Low    | 2184             | 84              | 26              |
|                                                                                     |          | L2 = Medium | 4452             | 84              | 53              |
|                                                                                     |          | L3 = High   | 6720             | 84              | 80              |



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