6PR LED
6″ Shallow Plenum Downlight – Round

Williams

CATALOG #: _____

L10-L30: 4-1/2″
L40-L70: 5-1/4″

ø5-5/8″

1/2″ min
1-1/4″ max

16-1/2″

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 6PR - TL - L20/835 - OPTIONS - CONTROL/DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

— HOUSING — / — TRIM — / MOUNT.

HOUSING

SERIES	LUMENS [1]		CRI		CCT		OPTIONS	CONTROL	DRIVER	VOLTAGE
6PR - TL	L10	1,000lm [2]	8	80	27	2700K	*See page 4 for EMERGENCY BATTERY OPTIONS.*	*See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.*	*See page 6 for ADDITIONAL CONTROL/DRIVER OPTIONS.*	UNV 120-277V
TrimLock	L15	1,500lm	9	90 [3]	30	3000K				347 347V [9]
	L20	2,000lm			35	3500K	ATH Airtight construction	– None	DIM Dimming driver, 0-10V	
	L30	3,000lm			40	4000K	CP Chicago plenum (CCEA) [4]	AVI-LVFA Avi-on wireless fixture control [6]	DIM1 1% Dimming driver, 0-10V	
	L40	4,000lm			50	5000K	F Fuse kit		DA Driver with 12V auxiliary power, without external dimming wires [8]	
	L50	5,000lm					SDT Stepdown transformer [5]	AWNR Lutron Athena wireless node integral fixture control, RF only [7]		
	L60	6,000lm								
	L70	7,000lm								

TRIM [10]

TRIM TYPE	DISTRIBUTION [11]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W 85° Wide	OF 1/2″ standard flange	CS Clear semi-specular powder coat	IP IP65 rated trim
A Angled lens [12]	M 35° Medium [14]	SF 1/4″ mud-in flange [16]	WH White texture powder coat	AD Diffuse acrylic lens [17]
S Non-conductive flush lens for shower applications [13]	N 25° Narrow [15]		BL Black texture powder coat	PD Diffuse 1/8″ polycarbonate lens [18]
				WET/CC Wet location, covered ceiling listed [19]
				AM Anti-microbial [20]

MOUNTING

MOUNTING TYPE [21]

N Open pan for new construction
I IC-rated enclosure for new construction [23]
R Remodel kit [24]

MOUNTING HARDWARE [22]

F1 Integral 2-position fixed pan bracket, universal bar hanger included [25]
BA1 Adjustable butterfly pan bracket, bar hanger not included [26]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [27]

NOTES

[1] Lumen output based on L trim type, W distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
[2] Not available with EM/10W emergency batteries.
[3] Extended lead times may apply. Consult factory for availability.
[4] I Mounting Type required.
[5] May be required for 347V, see product builder at hew.com/product-builder.
[6] DA Driver only. See page 6 for AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS.
[7] DA Driver only.
[8] Avi-on and Lutron Athena Controls only.
[9] Not available with EM batteries, DA or DMX Drivers.
[10] Trim ships separately.
[11] Beam angle based on WH reflector finish and L Trim Type.
[12] Wide distribution only. Diffuse acrylic lens standard.
[13] W Distribution, OF Flange Type, and WH Reflector Finish only. Standard with AD diffuse acrylic lens. IP and WET/CC options standard.
[14] Not available with L50 lumen package or higher.

[15] Not available with L50 lumen package or higher.
[16] For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH or IP options.
[17] L Trim Type only. W distribution only.
[18] W distribution only.
[19] Not available with PD trim option.
[20] WH and BL Reflector Finishes only. Not available with S Trim Type.
[21] Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
[22] Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
[23] L30 lumen package max. Not available with EM batteries.
[24] Also used in new construction sheetrock ceilings. Pan-less installation.
[25] N and I Mounting Types only. I Mounting requires external brackets.
[26] N Mounting Type only.
[27] N Mounting Type only.

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6PR LED
6" Shallow Plenum Downlight – Round

FEATURES

TrimLock®

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Beam angles ranging from 25° narrow to 85° wide for tailored performance
- Die-cast trim with flush or angled lens provides glare-free illumination for a soft ceiling appearance
- Industry-leading efficacies as high as 106 lm/W – ENERGY STAR® certified
- Fully room-side accessible
- Wireless in-fixture control solutions available

ENERGY STAR

SPECIFICATIONS

- **HOUSING** – Spun housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Mounting clips allow for ceiling thickness from 1/2"– 1-1/4" (consult factory for additional ceiling thicknesses).
- **TRIMLOCK** – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- **LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- **ELECTRICAL** – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours.
- **MOUNTING** – Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Remodel kit option includes receiver bracket hardware. Minimum 24" O.C. marked spacing required for L50 - L70 lumen packages.

- **LISTINGS** –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - ENERGY STAR® certified in select configurations, see www.energystar.gov
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- **WARRANTY** – 5-year limited warranty, see hew.com/warranty.

FIXTURE PERFORMANCE DATA

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1111	10.7	104
	M	1127	10.7	105
	N	1137	10.7	106
L15	W	1696	16.6	102
	M	1720	16.6	104
	N	1736	16.6	105
L20	W	2208	22.7	97
	M	2239	22.7	99
	N	2260	22.7	100
L30	W	3293	33.2	99
	M	3309	33.2	100
	N	3224	33.2	97
L40	W	4394	44.1	100
	M	4415	44.1	100
	N	4302	44.1	98
L50	W	5503	54.7	101
	M	–	–	–
	N	–	–	–
L60	W	6010	68.2	88
	M	–	–	–
	N	–	–	–
L70	W	7023	78.2	90
	M	–	–	–
	N	–	–	–

MULTIPLIER TABLES

COLOR TEMPERATURE

	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
	5000K	1.02
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

TRIM

CATALOG NUMBER	CONVERSION FACTOR
S	0.85
AD	0.85
PD	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on L trim type, W distribution and WH finish, 3500K, 80 CRI, actual lumens may vary +/-5%
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

PHOTOMETRY

6PR-TL-L20/835-DIM-UNV-LW-OF-WH Report #: 12326812.29; 06/08/18 | Total Luminaire Output: 2208 lumens; 22.7 Watts | Efficacy: 97.3 lm/W | 81.8 CRI; 3647K CCT
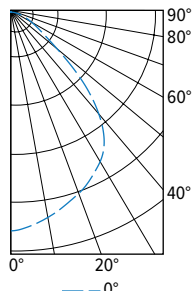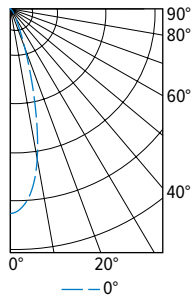

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	1169	
5	1148	81
15	1075	174
25	989	243
35	859	267
45	556	183
55	223	86
65	111	47
75	51	21
85	12	3
90	1	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1399	64
	0 - 60	2029	92
	0 - 90	2208	100
	0 - 180	2208	100

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6PR-TL-L20/835-DIM-UNV-LM-OF-WH Report #: 12326812.31; 06/08/18 | Total Luminaire Output: 2239 lumens; 22.7 Watts | Efficacy: 98.8 lm/W | 81.7 CRI; 3644K CCT

VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	5151	
5	4950	333
15	3241	421
25	1025	188
35	304	80
45	134	46
55	70	27
65	36	15
75	17	7
85	3	1
90	0	

ZONE	LUMENS	% FIXTURE
0 - 40	2013	90
0 - 60	2182	97
0 - 90	2239	100
0 - 180	2239	100

6PR-TL-L20/835-DIM-UNV-LN-OF-WH Report #: 12326812.32; 06/08/18 | Total Luminaire Output: 2260 lumens; 22.7 Watts | Efficacy: 99.7 lm/W | 81.6 CRI; 3629K CCT
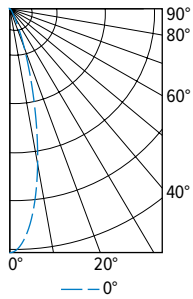
VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	8348	
5	7547	466
15	3235	381
25	771	137
35	212	57
45	107	38
55	66	27
65	37	16
75	16	7
85	3	1
90	0	

ZONE	LUMENS	% FIXTURE
0 - 40	2060	91
0 - 60	2203	98
0 - 90	2260	100
0 - 180	2260	100

TRIMLOCK DETAILS

TWIST

PULL

RELEASE

TRIM TYPE DETAILS

FLUSH
ø5-5/8" 1/8"
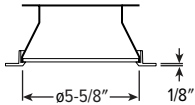
SHOWER
ø5-5/8" 1/8"
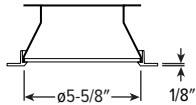
ANGLED
ø5-5/8" 1/8"
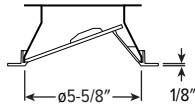
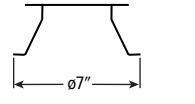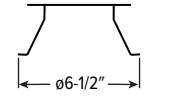## FLANGE TYPE DETAILS

1/2" STANDARD
ø7"
Ceiling Cutout: ø6-1/2"

1/4" MUD-IN
ø6-1/2"
Ceiling cutout: ø6-3/4"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)
1/8" 1/2"
ø6-9/16"
ø9-1/2"
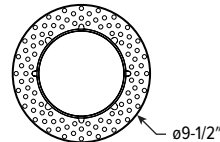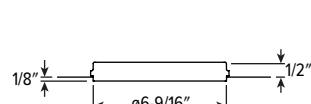
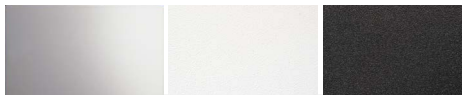## REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

BL
Black

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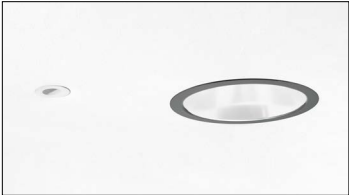# 6PR LED
6″ Shallow Plenum Downlight – Round

EMERGENCY BATTERY OPTIONS

Additional limitations apply, see page 1. Specify CEC in the option code when California Energy Commission regulations are required.
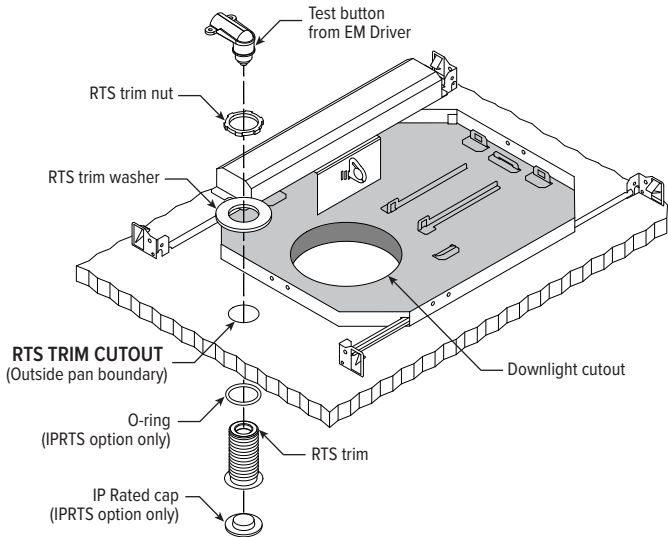
CATALOG NUMBER	DESCRIPTION
EM/7W	7-watt emergency battery [1]
EM/7W/RTS	7-watt emergency battery with regressed test switch [2]
EM/7W/IPRTS	7-watt emergency battery with IP65 rated regressed test switch
EM/10W	10-watt emergency battery [1]
EM/10W/RTS	10-watt emergency battery with regressed test switch [2]
EM/10W/IPRTS	10-watt emergency battery with IP65 rated regressed test switch

1   Not available with S Trim Type or IP Option.
2   Not available with S Trim Type, IP or WET/CC Options.
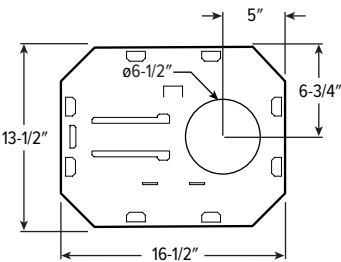
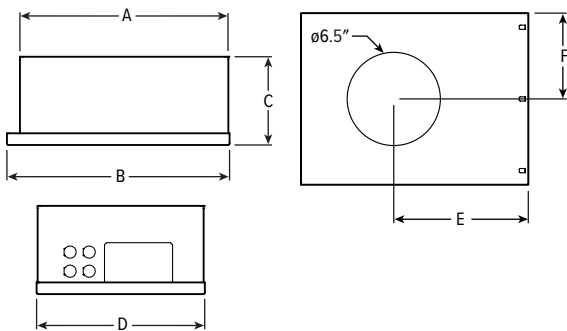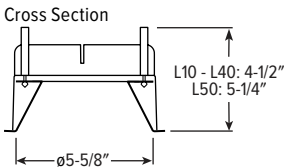## REGRESSED TEST SWITCH DETAILS

Shown Installed

Test button from EM Driver

RTS trim nut

RTS trim washer

RTS TRIM CUTOUT
(Outside pan boundary)

O-ring
(IPRTS option only)

RTS trim

IP Rated cap
(IPRTS option only)

Downlight cutout

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

5″
ø6-1/2″
6-3/4″
13-1/2″
16-1/2″

IC-RATED

A
C
B
D
ø6.5″
F
E

	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L20	15-1/16″	16″	4-1/2″	12-1/8″	9-1/2″	6-1/16″
L30	15-3/16″		6-3/8″			

REMODEL

Cross Section

L10 - L40: 4-1/2″
L50: 5-1/4″
ø5-5/8″

Receiver Bracket

2-3/4″
3-1/4″
6-5/8″
1-1/8″ min space
Ceiling cutout

Driver and Junction Box

5-1/4″
4-1/8″
6-15/16″

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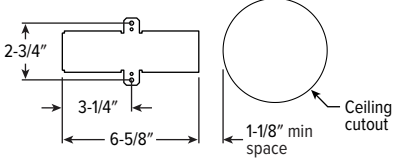
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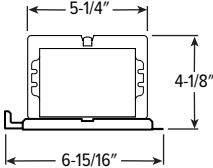
6PR LED
6″ Shallow Plenum Downlight – Round

APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG NUMBER	CEILING CUTOUT	FINISH
4AR 6AR 4DR 6DR 4DS 6DS 4PR 6PR 4PS 6PS 8DR	GR	Specify ceiling cutout in 1/8″ increments. Example: 5.75″ = **0575** See Kit Components for application limits.	**CS** Clear semi-specular powder coat **WH** White texture powder coat **BL** Black texture powder coat

For use with remodel downlights. Additional finishes available, consult factory.
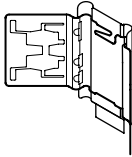For limitations and instructions, see hew.com/aperture-adaptor.pdf

MOUNTING HARDWARE DETAILS

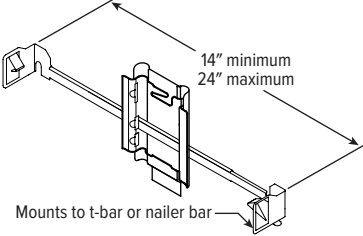**F1** Integral 2-position fixed pan bracket, universal bar hanger included
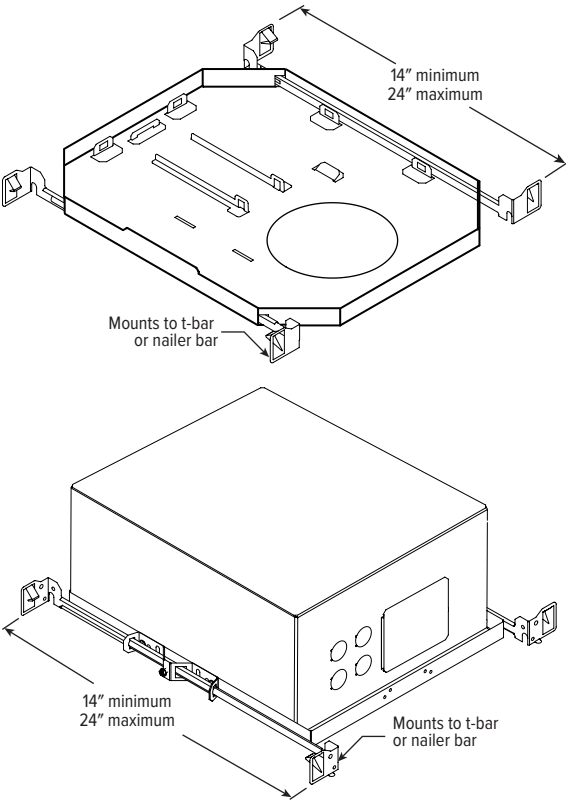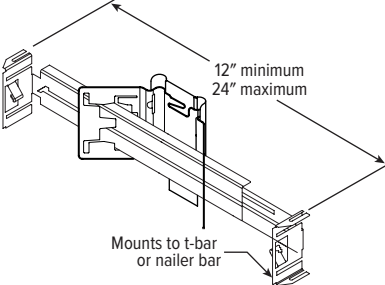
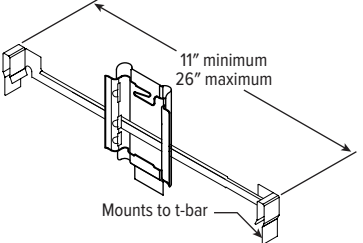**BA1** Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)

CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)

14″ minimum 24″ maximum

Mounts to t-bar or nailer bar

14″ minimum 24″ maximum

Mounts to t-bar or nailer bar

BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

12″ minimum 24″ maximum

Mounts to t-bar or nailer bar

11″ minimum 26″ maximum

Mounts to t-bar

14″ minimum 24″ maximum

Mounts to t-bar or nailer bar

F1 with I Mounting Type

SEE NEXT PAGE FOR CONTROL DETAILS.

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AVI-ON BLUETOOTH WIRELESS CONTROL DETAILS

FEATURES

Simple

- Gateway-free distributed control
- Factory pre-commissioning
- Contractor friendly installation
- Occupancy/vacancy/daylight sensing

Scalable

- Virtually unlimited network size
- Spans small offices to large warehouses
- Flexible control strategies

Secure

- Optional cloud connectivity
- UL IoT platinum security rating
- DLC 5.0 compliant

COMMISSIONING & INSTALLATION TOOLS

Avi-on mobile apps provide intuitive, quick installation and commissioning. Pro tools are available to qualified installers. Live commissioning training and on-site or remote support by Avi-on must be ordered separately through Avi-on.
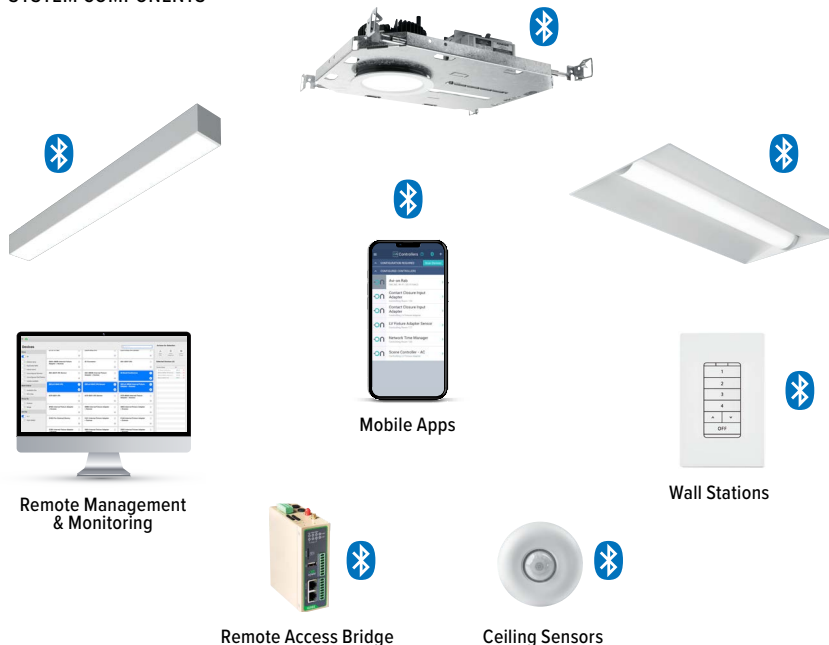

Commissioning Mobile App

Zone Scanner Web App

Commissioning Pro App

SYSTEM COMPONENTS

Mobile Apps

Remote Management & Monitoring

Remote Access Bridge

Ceiling Sensors

Wall Stations

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ACCESSORIES

WALL STATIONS	
AVI-2401AC	Scene controller - numbered 1-4, 120-277VAC
AVI-2402BAT	Scene controller - numbered 1-4, battery powered
AVI-2401AC-2	Dimmer with presets - percentages, 120-277VAC
AVI-2402BAT-2	Dimmer with presets - percentages, battery powered
AVI-2401AC-3	On/off/dimming, 120-277VAC
AVI-2402BAT-3	On/off/dimming, battery powered

NETWORK	
AVI-RAB-LTE	Remote access bridge – LTE connection
AVI-2001RAB-01-C	Remote access bridge – Wifi connection
AVI-KIT-NTM	Network time manager with battery backup

CEILING MOUNT SENSORS	
AVI-KIT-SEN-DUCM	PIR motion and ultrasonic sensor kit
AVI-KIT-SEN-ICM	PIR motion and photocell sensor kit

For load controllers and additional accessory info, see hew.com/avi-on

ADDITIONAL CONTROL/DRIVER OPTIONS

Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers, L50 max for DIM LINE driver. R mounting type requires top access with DMX controls. R Mounting Type not available with VRF or FCJS controls. 347V may require stepdown transformer, see product builder at hew.com/product-builder. I Mounting Type not available with Lutron controls.

CATALOG NUMBER	DESCRIPTION
AVI-LVFA/DA	Avi-on wireless fixture control for use with driver with 12V auxiliary power
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, with Lutron Hi-lume 1% EcoSystem dimming LED driver
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DALI	DALI dimming driver
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver