LED

BoltPro Hexagon | Pendant, Surface, Wall
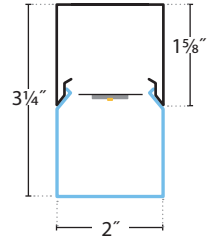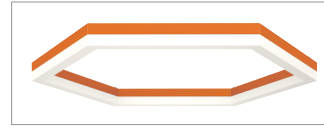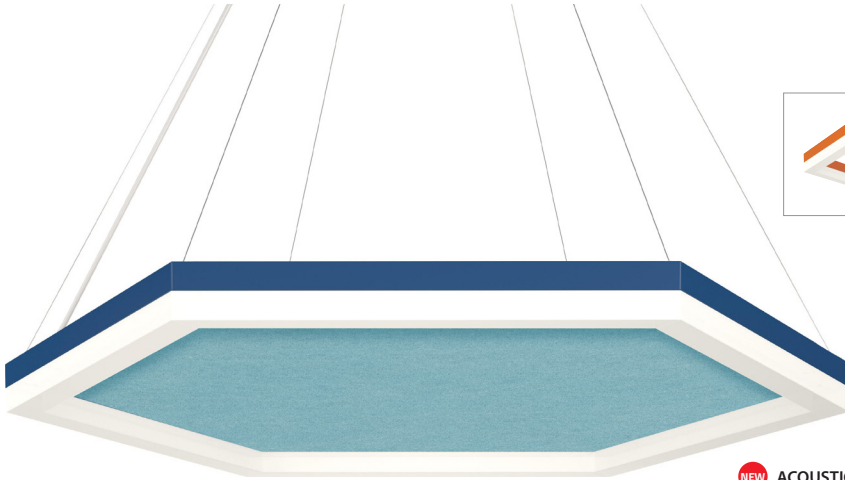
NEW ACOUSTIC OPTIONS

1 5⁄8″
3 1⁄4″
2″

Design + Function. BoltPro shapes + sound absorbing panels.

Bolt Triangle, Square, Pentagon and Hexagon now available with acoustic panels. We are in an era of open ceilings, concrete floors where noise reduction is imperative. Add fixtures with abundant light, vertical illumination and a multitude of shapes and colors for a "two birds (maybe three), one stone" solution.

BHEX-PRO-LED35-LO

5780	Delivered Lumens
44	Watts
131	lm/w

UP TO 131 LPW

	LO	MO	SO	HO
lm	5750	10000	13700	17500
w	44	78	113	150

Lumen output may vary +/- 5%
3500K used for lm/ft estimates above
4000K +2% llf, 3000K −2%, 2700K −4%
-10% LLF for 90 CRI (4K, 3500K and 3K)
See LED Details PDF for more info

SOCIAL MEDIA KIT   Declare.   LED WARRANTY 5 YEAR   LED Details   Made in the US★

| SERIES	NOMINAL LENGTH	LED COLOR	OUT-PUT	SHIELD-ING	ACOUSTIC COLORS (OPTIONAL)		COLOR/ FINISH	VOLT-AGE	MOUNT-ING	CEILING SYSTEMS	DRIVERS	OPTIONS & SENSORS
BHEX-PRO	22			SAL								
BoltPro Hexagon	22 2´+ 2´+ 2´+ 2´+ 2´+ 2´ (50˝ Diameter)	LED27 2700K (90CRI) LED3 3000K LED35 3500K LED4 4000K LED3-90 90CRI LED35-90 90CRI LED4-90 90CRI LED5-90 90CRI	LO Low MO Medium SO Standard HO High PROG Programmable Light Output (Specify desired lm/ft or w/ft)	SAL Satin Acrylic Lens	**STANDARD:** DB05 White DB03 Marble DB33 Grey **PREMIUM:** (LONGER LEAD TIMES) DB02 Oat DB27 Teal DB24 Sky Blue DB26 Midnight Blue DB09 Yellow DB16 Orange DB10 Red DB28 Hickory DB12 Pink DB01 Sand Dollar DB06 Periwinkle DB36 Black DB20 Lime DB23 Honey Dew DB18 Maroon DB14 Violet	DB29 Brown DB30 Earth Brown DB32 Stone DB34 Charcoal DB35 Pepper DB31 Blue Jean DB25 Navy DB11 Berry DB17 Pumpkin DB08 Lemon DB19 Pear DB21 Green DB22 Heather Green DB13 Lilac DB15 Purple DB07 Salmon	TMW Textured Matte White YGW Gloss White (Standard) Y__ Premium Color CC Custom Color **NOTE:** All canopies are painted the same color as the fixture. Consult factory to specify	UNV (120-277) 347 (Emergency battery requires a Step Down transformer)	CA48˝, 96˝ or 144˝ Aircraft Cable (Adjustable) 6RPM48˝, 96˝ or 144˝ Round Cast Aluminum Canopy (24˝ min from fixture to ceiling) 6SPM48˝, 96˝ or 144˝ Square Cast Aluminum Canopy (24˝ min from fixture to ceiling) SUR Surface or Wall Mount	X1 T-Bar 15⁄16˝ or 9⁄16˝ Exposed (Standard) X3 Hard Ceiling X6 Slot Grid or Interlude	ND Non-Dimming DM01 0-10v, 1% Dimming (Standard) LDE1 Hi-lume 1% EcoSystem LED (Soft fade on, fade-to-black dimming) ECO 1% 0-10v, EldoLED (Logarithmic dimming std) ECDA 1% DALI, EldoLED (Logarithmic dimming std) nLight-Air includes rIO (ECDA driver ONLY) nLight-Wired Acuity nLight Drivers (ECO driver ONLY) SOLO 0.1% 0-10v, EldoLED (Dim-to-dark, Logarithmic dimming std) SODA 0.1% DALI, EldoLED (Dim-to-dark, Logarithmic dimming std) STEP Signify Advance Step Dimming 2WIRE ELV/ Forward/Reverse Phase Driver	EMHE CA T20 Emergency Battery (1350 Delivered lumen; CA Title 20 compliant) ETS-DR Iota ETS-DR Emergency Transfer Switch **SENSORS:** (See Page 8) 205 WattStopper PIR Occupancy **205-ON/OFF** **205-STEP:** Dim to 50% **205-DM:** Dim to 1% ATHENA Lutron RF ENL Enlighted SU-5E-IOT LVOC‡‡ Lutron Vive (Occ & RF) LVRF‡‡ Lutron Vive (RF Only) ‡‡ Requires Lutron driver NXSMP Hubbell (Occ) nLT-AIR-ADCX Daylight+(PIR Acoustic) Occ nLT-WIRED-ADCX Daylight+(PIR Acoustic) Occ

PHOTOMETRICS

Low Output:
BHEX-PRO-LED35-LO

5780	Delivered Lumens
44	Watts
131	lm/w
3500	CCT
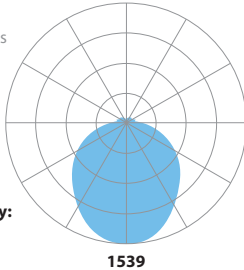
Zonal Lumen Summary:
0-90 (Down) = 88%
90-180 (Up) = 12%

1539

Vertical Angle	0°	45°	90°	135°	180°
0°	1539	1539	1539	1539	1539
5°	1531	1532	1531	1535	1535
15°	1475	1473	1477	1483	1484
25°	1355	1359	1365	1373	1371
35°	1200	1204	1212	1216	1217
45°	1034	1038	1045	1051	1050
55°	863	869	876	882	881
65°	680	690	698	706	707
75°	489	498	510	517	520
85°	314	315	327	335	339
90°	148	156	174	187	186
95°	162	188	167	171	176
105°	145	144	149	142	152
115°	103	121	124	119	107
125°	76	92	99	94	83
135°	72	82	94	85	79
145°	62	65	73	73	67
155°	45	46	49	51	47
165°	25	26	28	29	27
175°	11	11	12	12	13
180°	0	0	0	0	0

LUMEN MAINTENANCE

L70 — 200,000+ Hours
L90 — 100,000+ Hours (LO, MO & SO)
L90 — 60,000+ Hours (HO)

LED SYSTEM — LED modules and drivers are field replaceable.

PROG (OPTIONAL) — Programmable light output. Specify desired lumens or watts per linear foot. Min: 3.75 w/ft, Max 12.5 w/ft.

BINNING — Standard binning (all Prudential LED boards) includes testing at the chip level and board integration to provide consistent color temperature within a 3-step MacAdam ellipse, with +/- 5% lumen output range and +/- .004 Duv.

LABELS — CSA and ETL damp labeled and I.B.E.W. manufactured.

ELECTRICAL — Must specify LED dimming controls. LED fixtures have constant current driver(s) with less than 20% THD when loaded to a minimum of 60%. Drivers sink a maximum of 6mA per driver. DM01 LED drivers are 0-10V dimmable and are compatible with most 0-10V wall slide dimmers and direct 0-10V analog signal dimmers. Max driver size 1.65″ w x 1.25″ h.

32v Forward Voltage (+/− 1 volt based on drive current)

Drive Currents:
LO: 100mA, **MO:** 100mA, **SO:** 250mA, **HO:** 325mA

CONSTRUCTION

Housing — Extruded aluminum, 25% PC recycled, 100% recyclable

Lens — Extruded acrylic, 100% recyclable

Weight — 24 lbs

MOUNTING — Fixture is to be suspended with aircraft cables or surface mounted.

WARRANTY — Single-source, 5 year limited warranty covers standard components and construction.

YSW – Seashell White (Matte)	**YCH** – Champagne (Metallic)
YSL – Silver (Metallic)	**YPE** – Pewter (Matte)
YRG – Rain Grey (Gloss)	**YSTM** – Storm Grey (Matte)
YBK – Black (Matte)	**YBB** – Black (Semi Gloss)
YSKM – Sky (Matte)	**YMB** – Military Blue (Matte)
YIB – Interstate Blue (Matte)	**YSAM** – Sapphire (Matte)
YFGM – Forest Green (Matte)	**YBR** – Bronze (Matte)
YBY – Boysenberry (Matte)	**YSRM** – Sunset Red (Matte)
YOR – Orange (Matte)	**YDAM** – Daffodil (Matte)

Choose from one of our Premium Colors with no set-up fee.

For paint chip samples, please email:
info@prulite.com

Acoustic panels by others, Prudential acoustics are only sold as part of the BoltPro fixture.

SENSOR BOX

205
WattStopper PIR Occupancy

ENL
Enlighted 2-Wire PIR Daylight, Motion & Environmental Sensor

NOTE: Sensor plate will match fixture color

SENSOR MOUNTING LOCATION
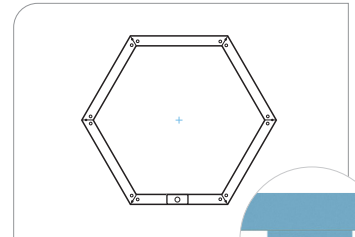
Sensor box is always centered in one lens

MOUNTING

CA48˝, 96˝ & 144˝: 5˝ Canopies

MOUNTING DIMENSIONS

• Cable & Surface Mounting

50⁹⁄₁₆˝

20⅞˝

24⅛˝

48¼˝
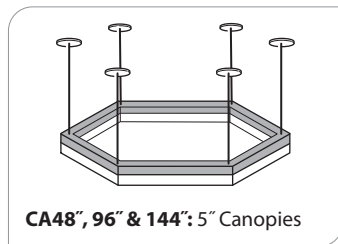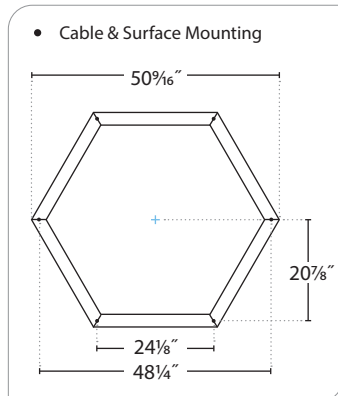
6RPM48˝, 96˝ or 144˝: Round Cast Aluminum Canopy
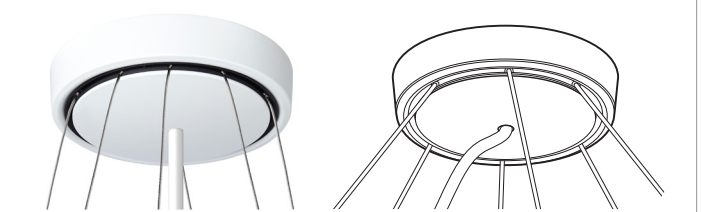
6SPM48˝, 96˝ or 144˝: Square Cast Aluminum Canopy
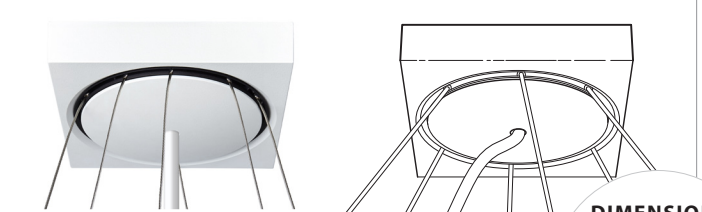
NOTE: Canopies cannot mount directly to t-bar grids
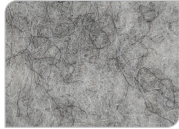
DIMENSIONS
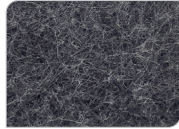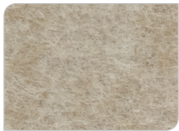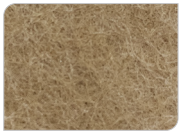

1⅝˝

6½˝
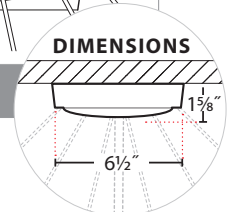
ACOUSTIC COLORS
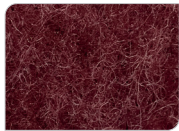
STANDARD
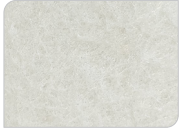
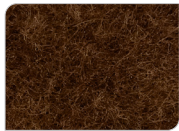DB05 White   DB03 Marble   DB33 Grey
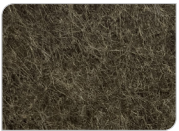
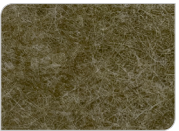### PREMIUM (LONGER LEAD TIMES)

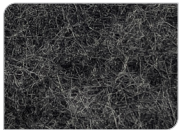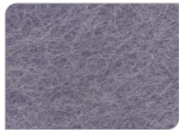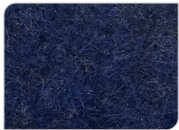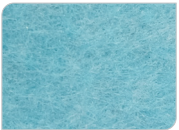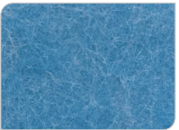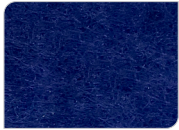| DB01 Sand Dollar	DB02 Oat	DB18 Maroon	DB28 Hickory	DB29 Brown	DB30 Earth Brown	DB32 Stone
DB34 Charcoal	DB35 Pepper	DB06 Periwinkle	DB31 Blue Jean	DB26 Midnight Blue	DB27 Teal	DB24 Sky Blue
DB25 Navy	DB11 Berry	DB10 Red	DB16 Orange	DB17 Pumpkin	DB09 Yellow	DB08 Lemon
DB20 Lime	DB19 Pear	DB21 Green	DB22 Heather Green	DB23 Honey Dew	DB12 Pink	DB07 Salmon
DB13 Lilac	DB14 Violet	DB15 Purple	DB36 Black			
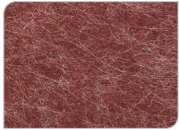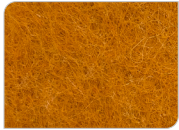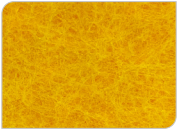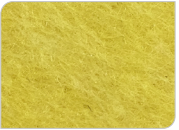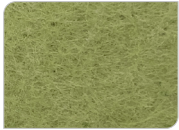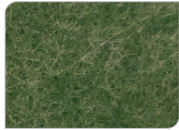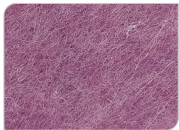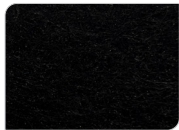
Consult factory for Premium Color acoustic lead times.

CROSS SECTION

½"   1⅝"   3¼"   2"

1⅝"   3¼"   2"
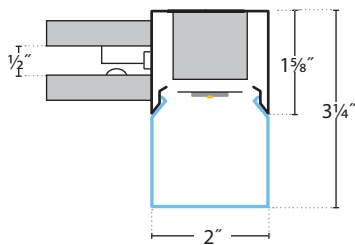
Two layers of acoustic with ½" air gap for better sound absorption
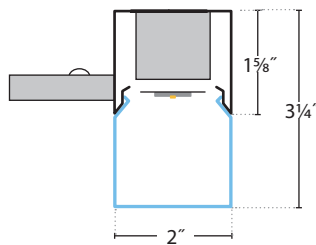
One layer acoustic for Surface Mounted

SOUND ABSORPTION

ACOUSTIC
1˝ Air Gap 2¼˝
ACOUSTIC

Two layers of acoustic trapping 1˝ of air for superior sound absorption

Why acoustical fixtures?
Open office, open ceilings, hard floors have replaced sound absorbing cubicles, acoustic ceilings and carpet, thus acoustics have declined, enter Acoustics.

The benefits of Acoustics?
— Reduced echoes, background noise
— Improved sound quality
— A more peaceful space
— Enhanced aesthetics

How can I calculate Acoustic sound absorption?
Sabins per object is the standard measurement. One Sabins is approximately 1ft^2 of sound absorption. Sound absorption varies at different frequencies.
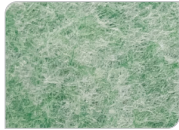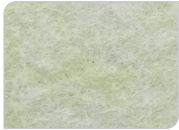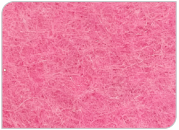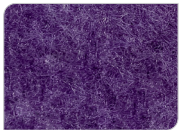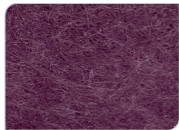
For precise acoustic performance of a space, please consult an acoustician.

Absorption chart — SABINS/OBJECT vs Frequency (Hz): SQUARE 36˝, SQUARE 24˝, TRIANGLE 36˝

What is an NRC rating?
Noise Reduction Coefficient (NRC) is a rating for how much sound a surface absorbs according to the test method ASTM C423. Acoustic performance is measured using this rating. NRC is the average Sabins per square foot of surface covered. Apparent NRC (A-NRC) Ratings are calculated from the total Sabins measured for an object array over an area of projected continuous ceiling This is equivalent to ceiling tile of the same NRC rating over the same installed area.

NRC ratings range from 0 to 1+

BOLTPRO SQUARE ACOUSTICS

NRC 0.0 — NRC 1.0

NRC .05 Standard Drywall
NRC .5 Standard Acoustic Tile
NRC .7 Good Acoustic Tile
NRC .9 Superior Acoustic Tile

NRC .02 Concrete Ceiling

A-NRC .25 24˝
(4) 24˝ – 18˝ Spacing Alternating with LED 14´ x 8´ Room

A-NRC .4 18˝
(8) 18˝ – 18˝ Spacing 14´ x 8´ Room

A-NRC .5 24˝
(8) 24˝ – 18˝ Spacing 14´ x 8´ Room

A-NRC .65 36˝
(6) 36˝ – 18˝ Spacing 13´ x 9´ Room

PRELIMINARY
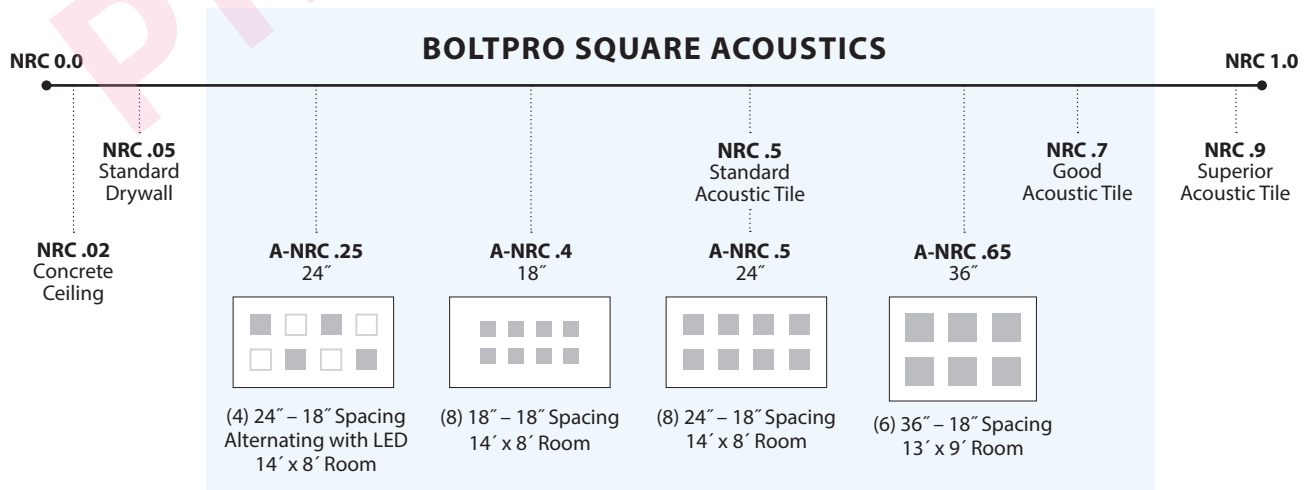
PRULITE ACOUSTIC CALCULATOR

How many Acoustic fixtures should you choose for your space? There are multiple factors when calculating acoustics, we have done our best to provide a simple guide for those who prefer not to calculate using Sabins per Object or NRC ratings.

1) Calculate the square feet of your space (L x W).

2) Choose the amount of acoustical improvement you want (sound absorption for reduced reverberation) and find the Acoustic VALUE based on room dimensions.

Estimated % of reduced reverberation time			SIZE	Room dimensions under 300 sq ft			Room dimensions over 300 sq ft		
				GOOD	BETTER	BEST	GOOD	BETTER	BEST
✓	GOOD	25%	36″ Triangle Acoustic	20	15	10	30	20	15
✓✓	BETTER	37.5%	24″ Square Acoustic	30	20	15	40	30	20
✓✓✓	BEST	50%	36″ Square Acoustic	40	30	25	60	40	30

Calculations based on a 9′ ceiling height.

Prudential Lighting Acoustic Calculator is a guide.

For precise acoustic performance, please consult an acoustician.

3) Use this Acoustic VALUE Formula to determine the number of luminaires recommended:

Square feet / Acoustic VALUE = # of luminaires recommended

Example:

20′ x 30′ = **600** square feet

36″ BoltPro Square Acoustics seeking Better (~37.5% reduced reverb), Acoustic VALUE = **40**

600 / 40 = **15** BoltPro Square Acoustics recommended for the space

NOTE: We are testing BoltPro Acoustical fixtures. this data is from our Gaze Square Acoustical fixtures which should be comparable.

LM79 & TM30 DATA:

	MEASURED CCT	MEASURED LUMENS	CRI	R9	DuV	SPD	TM30 — COLOR VECTOR	TM30 — COLOR DISTORTION
LED27	2680	80%	93	58	0.001		89 Rf	97 Rg
LED3	3042	95%	82	6	0.001		81 Rf	92 Rg
LED3-90	3016	85%	93	61	0.000		88 Rf	96 Rg
LED35	3482	100%	82	3	0.002		81 Rf	92 Rg
LED35-90	3417	85%	93	67	0.000		88 Rf	96 Rg
LED4	3952	102%	82	4	0.003		81 Rf	92 Rg
LED4-90	3882	85%	92	67	0.003		87 Rf	96 Rg
LED5-90	4889	85%	94	84	0.002		86 Rf	95 Rg

SENSORS

205: Wattstopper	**ENL:** Enlighted Occupancy / Daylight	**LVOC:** Lutron Occupancy /Daylight Sensor	**LVRF:** Lutron Vive Control Node	**NXSMP:** Hubbell Occupancy /Daylight Sensor
Low voltage PIR fixture integrated occupancy sensor.	Enlighted Network Integrated/embedded networked lighting control, luminaire-level lighting control, LLLC. When configured as an IoT Node, the sensor streams comprehensive live data for use with Enlighted's real-time location and analytics software applications. This option is available directly from the factory or as a remote upgrade. Wireless Internet.	Measures light in the space (daylighting) while detecting people moving within an area using passive infrared to determine occupancy. Controls the lights to balance the light level in the space, combining convenience, exceptional energy savings, and ease of installation.	Provides wireless control of the fixture when neither occupancy nor daylight sensing is needed.	Hubbell Integrated/embedded networked lighting control, luminaire-level lighting control, LLLC. PIR motion sensor for automatic On/Off control. Integrated daylight sensor for daylight harvesting and/or lumen maintenance. Bluetooth radio provides wireless control of luminaire. Simple plug-in connection to NX Fixture Modules. Wireless Internet.

ATHENA	**NLT-AIR-rIO:** Daylight+Occ	**NLT-AIR-ADCX:** Daylight+(PIR Acoustic) Occ	**NLT-WIRED-nIO:** Daylight+Occ	**NLT-WIRED-ADCX:** Daylight+(PIR Acoustic) Occ
The Athena wireless node is a radio frequency (RF) device that enables simple, digital control of individual light fixtures in an Athena control system. The small size and compatibility with a wide variety of drivers allow for seamless integration with common commercial lighting fixtures from any manufacturer. Requires drivers with auxiliary power, consult factory for lead times	The rIO is a fixture embedded low voltage wireless nLight AIR device capable of individual fixture control and analog or digital dimming. This smart device results in the luminaire being "nLight AIR-enabled" —making it an addressable nLight AIR device. It uses a 900MHz radio to communicate with other nLight AIR devices, such as occupancy sensors, photocells, wall switches, powerpacks and other nLight AIR-enabled lumnaires. This allows for advanced operation and design flexibility ranging from stand-alone rooms to building and campus-wide networks.	The nLight® AIR rES7 sensor is an in-fixture, low voltage, digital sensor providing embedded wireless lighting control, analog or digital dimming, occupancy detection and daylight harvesting capabilities. The rES7 is designed for mounting heights up to 20 ft in indoor luminaries. The rES7 sensor provides Passive Infrared (PIR) occupancy detection over a 15-20 ft (4.57 - 6.10 m) radial coverage pattern and photocell light level detection in one compact low profile design with optional Dual Technology, which adds Microphonics™ to PIR detection. The rES7 sensor is ideal for occupancy and daylighting control in suspended or recessed luminaries.	nLight digital nIO modules are low voltage control devices that enable digital control of LEDcode enabled eldoLED LED drivers. Through eldoLED's bi-directional 2-wire interface, these modules deliver natural, flicker-free high performance dimming while eliminating common issues related to 0-10 VDC alternatives. The modules also enable the eldoLED LED Drivers to be addressable, as well as capable of digitally communicating with other nLight controls such as occupancy sensors, photocells, and WallPods. This allows for advanced operation and design flexibility ranging from stand-alone rooms to building and campus-wide networks.	The nES 7 is a small passive infrared occupancy sensor designed to be easily embedded into luminaires. This sensor provides excellent line of sight 360° PIR detection of small motion and walking motion. The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion (e.g. corridors, library stacks). Additionally, an optional integrated photocell enables daylight harvesting control as well. Typically one or more nES 7 sensors are paired with an nLight controller within an nLight enabled luminaire. For rooms like classrooms and private offices or any space with obstructions, the nES PDT 7 dual technology sensor is recommended.