

How to Specify

Example:

Step 1

Control type selection:

Choose the IC control type: **DS(#)** daylight sensor, **OS(#)** occupancy sensor, **DOS(#)** daylight & occupancy sensor or **WC(#)** wireless control dimming

Step 2

Control ordering code selection : Choose the IC control ordering code (see table on pages 3-6).

Step 3

Quantity selection : Choose the Quantity of the controls.

Specify the complete code on the spec sheet

MOUNTING/SUSPENSION		BATTERY (OPTIONAL)	OTHER (OPTIONAL)	IC CONTROLS (OPT.)	CUSTOM (OPT.)
CA(L)	drywall+ cable length (36" std.)	B(#)	F fuse	DS(#)	C custom
CT9(L)	TB/TG 9/16+ cable length (36" std.)			OS(#)	
CT15(L)	TB/TG 15/16+ cable length (36" std.)			DOS(#)	
CTS(L)	ST+ cable length (36" std.)			WC(#)	
SA(L)	drywall+ stem length >48" (18" std.)				
White canopy standard		Minimum 4ft; please consult factory		Specify quantity. Requires 8" blank Consult factory for Tunable White. Not available with DPB (DY) driver for BIOS with Dynamic Spectrum.	Please specify

Example:

Control type: **WC(#)**

Control ordering code: **L,WC,1,LDE1**

Quantity: **2**

The code to specify on the spec sheet: **WC(L,WC,1,LDE1,2)**

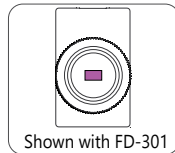
Axis luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS) combination daylight/occupancy sensors (DOS) and wireless control (WC). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

- Consult factory for other options.
- All sensors will be white standard, consult factory for other colors

The integrated control systems offered are:

● DAYLIGHT HARVESTING (DS):

With Daylight sensors, maximum illumination output is reduced according to the available amount of natural light. By reducing maximum illumination output, energy consumption is reduced by up to 20 percent in a process known as "Daylight Harvesting".



Shown with FD-301

● DAYLIGHT HARVESTING AND OCCUPANCY (DOS):

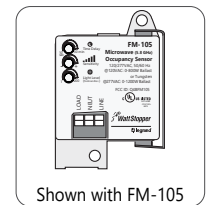
A combination of Daylight & Occupancy sensor. In one form factor. All DOS sensor can be wired or wireless with various control protocols.



Athena Wireless Node Sensor
(A-WN-D01-OCC-WH shown)

● OCCUPANCY (OS):

When a room is vacated, occupancy sensors ensure the light will be turned off after a programmed delay as well as ensuring that light remains on while the room is occupied.



Shown with FM-105

● WIRELESS CONTROL (WC):

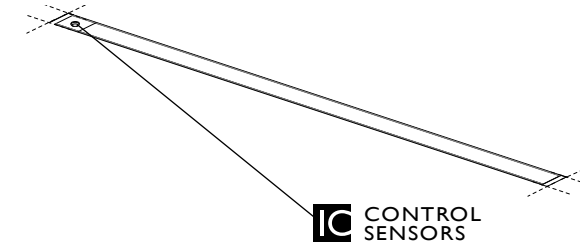
Wireless Control Dimming, enabling you to control and manage LED luminaires.

With wireless smart lighting control, luminaires themselves can become addressable nodes in a network.



Shown Lutron Vive RF

DFCSJ-OEM-RF

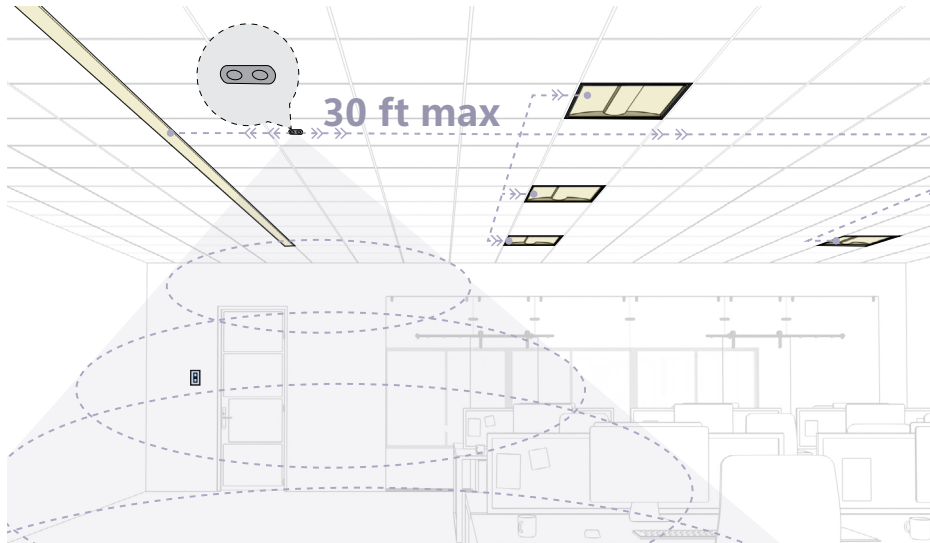


* Incorporating IC controls may affect the length of the luminaire. Please contact factory for more details.

Axis luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS) combination daylight/ occupancy sensors (DOS) and wireless control (WC). These options can be seamlessly integrated into our luminaires. According to their functionality devices mentioned in this guide could fulfill the following type of Control Applications:

Standalone Control Applications:

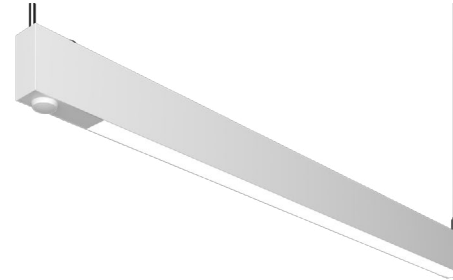
This type of sensors do not have ability to communicate with another sensor of the same type, room control or building control system. These devices will sense the occupancy or/and the ambient light changes inside their sensing zone only. The fixture (or the part of the fixture) light output will be adjusted according only to what was sensed in the sensor control zone.



Building Control Applications:

This type of control is similar to the previous option, however, it is not limited to a single room. In this case the sensors are communicating with the Building Control System. In addition to the sensing, some other data (driver power consumption for example) could be communicated to the control system when the sensors capabilities include such data reporting. Since the communication is bi-directional, the control system can override the current sensor setting and set preprogrammed and prescheduled parameters for dimming or/and color temperature.

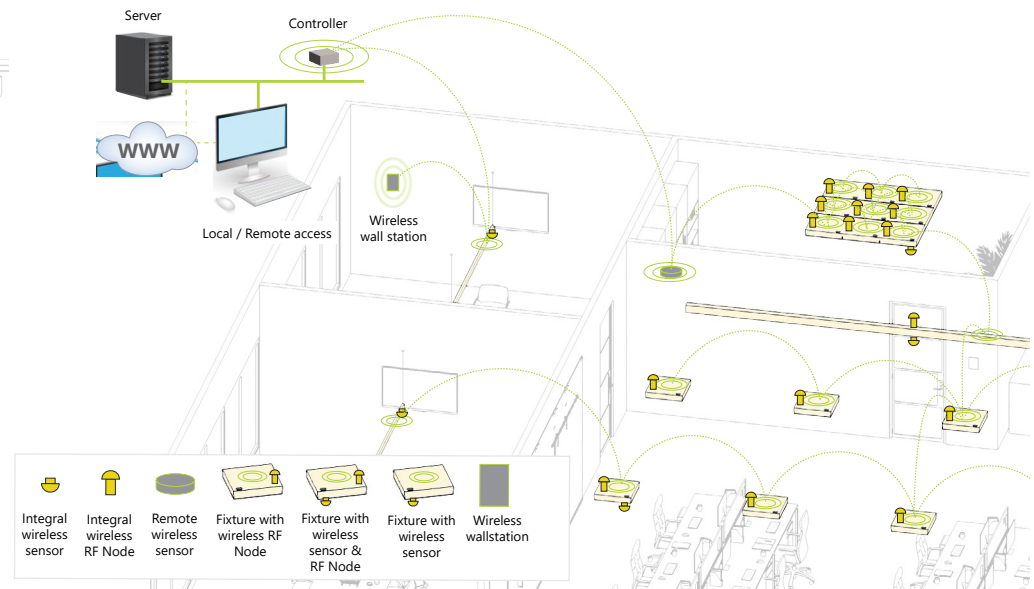
Important: Please note that all devices in this application group require onsite commissioning by their respective manufacturer. Axis Lighting Inc. does not provide sensor commissioning services.



Room Control Applications:

This type of control requires sensor(s) with built-in communication in addition to the sensing. This functionality is allowing the sensor(s) to communicate with other devices of the same type, or/and compatible wireless devices (WC Nodes, wall switches, controllers, power supplies etc.). Since the communication is bi-directional the other devices could also send control commands if the sensing needs to be overridden. For example, regardless if the daylight sensor calculated that more (or less) light is needed, the sensor determined luminaire output could be overridden by a compatible wall switch(es).

Important: Please note that some devices in this application group require onsite commissioning by their respective manufacturer (shown in the following device matrix). Axis Lighting Inc. does not provide sensor commissioning services.



Control Product Ordering Code Designation

INTEGRATED CONTROLS FEATURES

DS	Daylight Sensor
OS	Occupancy Sensor
DOS	Daylight & Occupancy Sensor
WC	Wireless Control

BRAND

W	WattStopper
A	Acuity (nLight; Sensor Switch)
L	Lutron
O	Encelium
COOP	Cooper Lighting

TECHNOLOGY

D	Daylight Photocell
P	PIR (Passive Infrared Sensing)
U	Ultrasonic
H	High Frequency
DT	Dual Technology (PIR + Microphonic sensing)
PC	PIR without wireless communication
DTC	Dual Technology without wireless communication
WC	Wireless Control only (no sensing)
PWC	PIR control with wireless communication
DTWC	Dual Technology with wireless communication

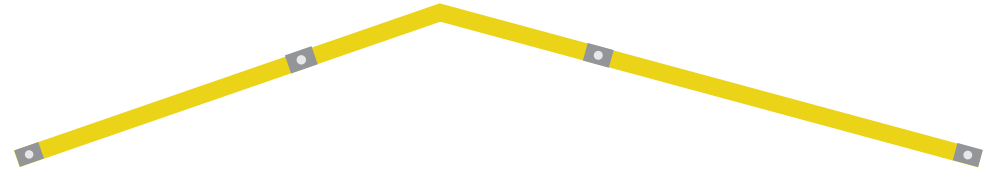
PART NUMBER

#	Axis sensor designation number
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DIMMING PROTOCOL

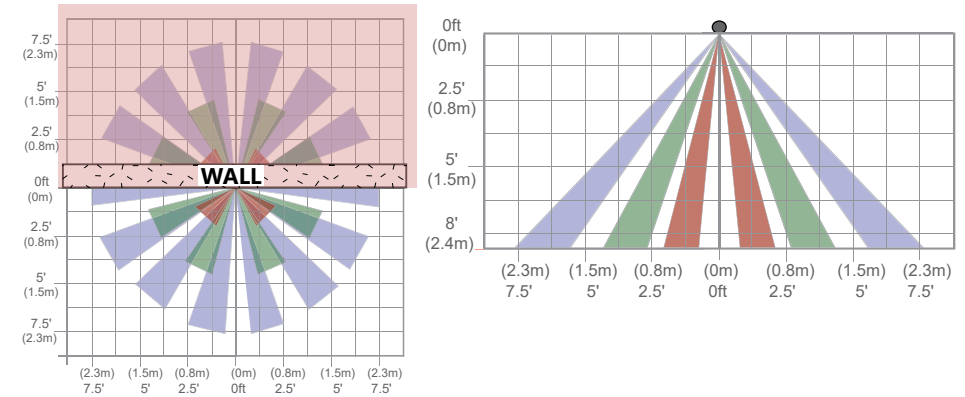
DP	0-10V driver
BI	Bi-level driver
DALI	DALI driver
D4I	DALI/D4i
LDE1	Lutron ECO driver
LED CODE	EldoLED LEDcode driver

All PIR based sensors mentioned in this guide are installed on blanks facing downward. Hence these sensor types could not be installed on vertically mounted luminaires, as well as not recommended for being installed on patterns, forms or long runs since multiple blanks will break the light pattern continuity.



Luminaire bottom view with PIR sensors.

All PIR based sensors are not recommended for installation on wall and perimeter options since the object must be very close to the wall to trigger the sensor.



Typical sensing zone of Wattstopper FS-205 Sensor with wall mount.

STANDALONE CONTROL APPLICATION:		OCCUPANCY SENSOR (OS)			
BRAND	ACUITY (SensorSwitch)		WATTSTOPPER		
PRODUCT DESCRIPTION	VERTEX 8F EZ OCC VLP PIR Occupancy default option (IP66 "OIP" Option available upon request)	MSD7 PIR Occupancy	FS-505 (Staircase) FS-505C (Open Area) Ultrasonic Occupancy	FM-105 High Frequency Occupancy (Wet & Staircase Locations)	
LUMINAIRE FAMILY	Product ordering code	A, P, 2, LEDCODE : LedCode dimming	A, P, 1, DP : 0-10V dimming	W, U, 1, BI : bi-level dim. W, U, 1, DP : 0-10V dim. W, U, 1, DALI : DALI dim.	W, H, 1, BI : bi-level dim. W, H, 1, DP : 0-10V dim. W, H, 1, DALI : DALI dim.
	Air	✓*	✓*	✓*	✓
	Aura, Day, Dia	✓	✓		
	Beam	✓	✓	✓	
	Click	✓*			
	Cubic Pendant	✓	✓	✓	
	Extend 2, Extend 4				✓*
	LT (Pendant), Mini Box (Pendant, Surface)	✓	✓	✓	
	Prime (all options except Wall)	✓*	✓*	✓*	✓
	Sculpt, Sculpt MikroLite, Sculpt Softzone (except Forms, Patterns, Perimeter, Vertical, Wall)	✓	✓	✓	
	Slim Pendant	✓	✓	✓	
	Wet Beam 4, Wet Beam DI (all options)	✓*			✓

* Not available for certain configurations, please consult factory.

If luminaire option is not listed above, please consult factory.

STANDALONE CONTROL APPLICATION: DAYLIGHT SENSOR (DS) & DAYLIGHT AND OCCUPANCY SENSOR (DOS)

BRAND		WATTSTOPPER DS		ACUITY (Sensor Switch) DOS	
PRODUCT DESCRIPTION		FD-301 (default DS option)		VERTEX 8F EZ ANL VLP (IP66 "OIP" Option available upon request)	MSD7 ADC
LUMINAIRE FAMILY	Product ordering code	W, D, 1, DP : 0-10V dim.		A, PC, 2, LEDCODE : LedCode dimming	A, PC, 3, DP : 0-10V dimming
	Air (all options except Wall)	✓		✓*	✓*
	Aura, Day, Dia	✓		✓	✓
	Beam	✓		✓	✓
	Click			✓*	
	Cubic Pendant	✓		✓	✓
	LT (Pendant), Mini Box (Pendant, Surface)	✓		✓	✓
	Prime (all options except Wall)	✓*		✓*	✓*
	Sculpt, Sculpt MikroLite, Sculpt Softzone (except Forms, Patterns, Perimeter, Vertical, Wall)	✓		✓	✓
	Slim Pendant	✓		✓	✓
	Wet Beam 4, Wet Beam DI (all options)			✓*	

* Not available for certain configurations, please consult factory.

If luminaire option is not listed above, please consult factory.

ROOM CONTROL APPLICATION:		WIRELESS DAYLIGHT & OCCUPANCY SENSORS (DOS)	
BRAND		LUTRON	
PRODUCT DESCRIPTION		VIVE INTEGRAL CONTROL (DFCSJ-OEM-OCC) (default option)	
LUMINAIRE FAMILY	Product ordering code	L, PWC, 2, D4i : D4i control L, PWC, 2, LDE1 : Lutron ECO driver, requires additional Lutron DFC-OEM-DBI	
	Air (all options except Wall)	✓	
	Aura, Day, Dia	✓	
	Beam	✓	
	Cubic Pendant	✓	
	LT (Pendant), Mini Box (Pendant, Surface)	✓	
	Prime (all options except Wall)	✓	
	Sculpt, Sculpt MikroLite, Sculpt Softzone (except Forms, Patterns, Perimeter, Vertical, Wall)	✓	
	Slim Pendant	✓	
	Stencil (except STLDI)	✓	

Important: Axis Lighting Inc. is providing the luminaire integral control device only (Sensor or RF Node)

For StencilFlex Integrated Controls, please see [Empower Integrated Controls Guide](#)

If luminaire option is not listed above, please consult factory.

ROOM CONTROL APPLICATION:		WIRELESS NODES (WC) no sensing, wireless communication only
BRAND	LUTRON	
PRODUCT DESCRIPTION	VIVE INTEGRAL CONTROL (DFCSJ-OEM-RF) (default option)	
Product ordering code	L, WC, 1, D4i : D4i DALI driver, L, WC, 1, LDE1 : Lutron ECO driver, requires Lutron DFC-OEM-DBI device	
LUMINAIRE FAMILY	Air	✓
	Aura, Day, Dia	✓
	Beam	✓
	Cove Perfekt	✓
	Cubic Pendant	✓
	Graze	✓
	LT (Pendant)	✓
	Mini Box (Pendant, Surface)	✓
	Prime (all options except Wall)	✓
	Sculpt, Sculpt MikroLite, Sculpt Softzone	✓
	SideStep	✓*
	Sketch, Sketch 2	✓
	Skyefall, SkyePlane, SkyePool, SkyeScape, SkyeView	✓
	Slim Pendant	✓
	Stencil (except STLDI option)	✓
	Steplight	✓
	Trayfit	✓

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BUILDING CONTROL APPLICATION:

WIRELESS DAYLIGHT & OCCUPANCY SENSORS (DOS)

	BRAND	ACUITY (nLight)	LUTRON		LEGRAND - WATTSTOPPER		COOPER LIGHTING
	PRODUCT DESCRIPTION	RES-7	VIVE INTEGRAL CONTROL (DFCSJ-OEM-OCC)	ATHENA INTEGRAL CONTROL (A-WN-D01-OCC)	ENCELIUM SensiLUM	LMFS-601	WaveLinx PRO (OEM-WAA-D)
LUMINAIRE FAMILY	Product ordering code	A, PWC, 1, LEDCODE : PIR, LEDCODE dimming A, DTWC, 1, LEDCODE : Dual technology: PIR + Microphone	L, PWC, 2, D4i : D4i DALI driver L, PWC, 2, LDE1 : Lutron ECO driver & additional Lutron DFC-OEM-DBI	L, PWC, 4, D4i : D4i DALI driver	O, PWC, 1, D4i : D4i DALI driver	W, PWC, 1, D4i : D4i DALI driver	COOP, PWC, 1, DP 0-10V driver
	Air (all options except Wall)	✓*	✓	✓	✓	✓	✓*
	Aura, Day, Dia	✓	✓	✓	✓	✓	✓
	Beam 2 Square, Beam 2, 3, 4, 6 (Pendant, Surface, Recessed)	✓	✓	✓	✓	✓	✓
	Click			✓		✓	
	Cubic Pendant	✓	✓	✓	✓	✓	✓
	LT (Pendant)	✓	✓	✓	✓	✓	✓
	Mini Box (Pendant, Surface)	✓	✓	✓	✓	✓	✓
	Prime (all options except Wall)	✓*	✓	✓	✓	✓	✓*
	Sculpt, Sculpt MikroLite, Sculpt Softzone (except Forms, Patterns, Perimeter, Vertical, Wall)	✓	✓	✓	✓	✓	✓
	Slim Pendant	✓	✓	✓	✓		✓
	Stencil (except STLDI option)		✓	✓	✓		
	Zen & Zen Square			✓	✓		

* Not available for certain configurations, please consult factory.

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If luminaire option is not listed above, please consult factory.

BUILDING CONTROL APPLICATION:		WIRELESS NODES (WC) no sensing, wireless communication only		
BRAND	ACUITY (nLight)	LUTRON		LEGRAND - WATTSTOPPER
PRODUCT DESCRIPTION	RIO	VIVE INTEGRAL CONTROL (DFCSJ-OEM-RF)	ATHENA INTEGRAL CONTROL (A-WN-D01-RF)	ENCELIUM CLM (IP54 RATED)
Product ordering code	A,WC,1,LED CODE: LED CODE Dimm.	L,WC,1,D4i: D4i DALI driver L,WC,1,LDE1: Lutron ECO driver. Requires additional Lutron DFC-OEM-DBI	L, WC, 3, D4i : D4i DALI driver	O, WC, 2, D4i : D4i DALI driver
Air, Aura, Day, Dia	✓	✓	✓	✓
Beam 2 Square, Beam 2, 3, 4, 6	✓	✓	✓	✓
Click			✓	
Cove Perfekt		✓	✓	✓*
Cubic Pendant	✓	✓	✓	✓
Graze Perfekt		✓	✓	✓
LT, Mini Box, Prime	✓	✓	✓	✓
Sculpt, Sculpt Softzone	✓	✓	✓	✓
Sculpt MikroLite	✓*	✓	✓	✓
SideStep		✓*	✓*	
Sketch, Sketch 2	✓*	✓	✓	✓*
SkyeFall, SkyePlane, SkyePool, SkyeScape, SkyeView, Trayfit	✓*	✓	✓	✓
Slim	✓	✓	✓	✓
Stencil (except STLDI option)		✓	✓	
Steplight		✓	✓	
Tacet	✓		✓	✓
Tranquility products (except Sconces and MRI options)	✓*	✓	✓	✓
Wall Wash Perfekt			✓	✓
Zen & Zen Square			✓	

* Not available for certain configurations, please consult factory.

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If luminaire option is not listed above, please consult factory.