Waldmann W

ENGINEER OF LIGHT.

DOTOO.LINE
POWER OVER ETHERNET (PoE)
SUSPENDED DIRECT-ONLY LUMINAIRE

DOTOO.line, Waldmann`s LED direct-only suspended linear luminaire, is available in a single or modular system of 4ft or 8ft sections interlinking using different start, middle and end luminaires for creating light lines. Featuring efficiency-boosting reflection technology and a conical prismatic screen, DOTOO.line ensures uniform illumination of the workspace. The luminaires are also maintenance-friendly due to easy access to the driver and mechanical ad electrical connection of the individual modules not requiring tools. Powered over Ethernet, the DOTOO.line's data is accessed via software and the light's dimming, timing, sensors, light color, and daylight harvesting can all be easily controlled. LUM CONNECT VTL, biodynamic light control, that mimics the changes in sunlight that occur with the course of the day, can also be implemented with this fixture.

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suspended direct-only luminaire DOTOO.line

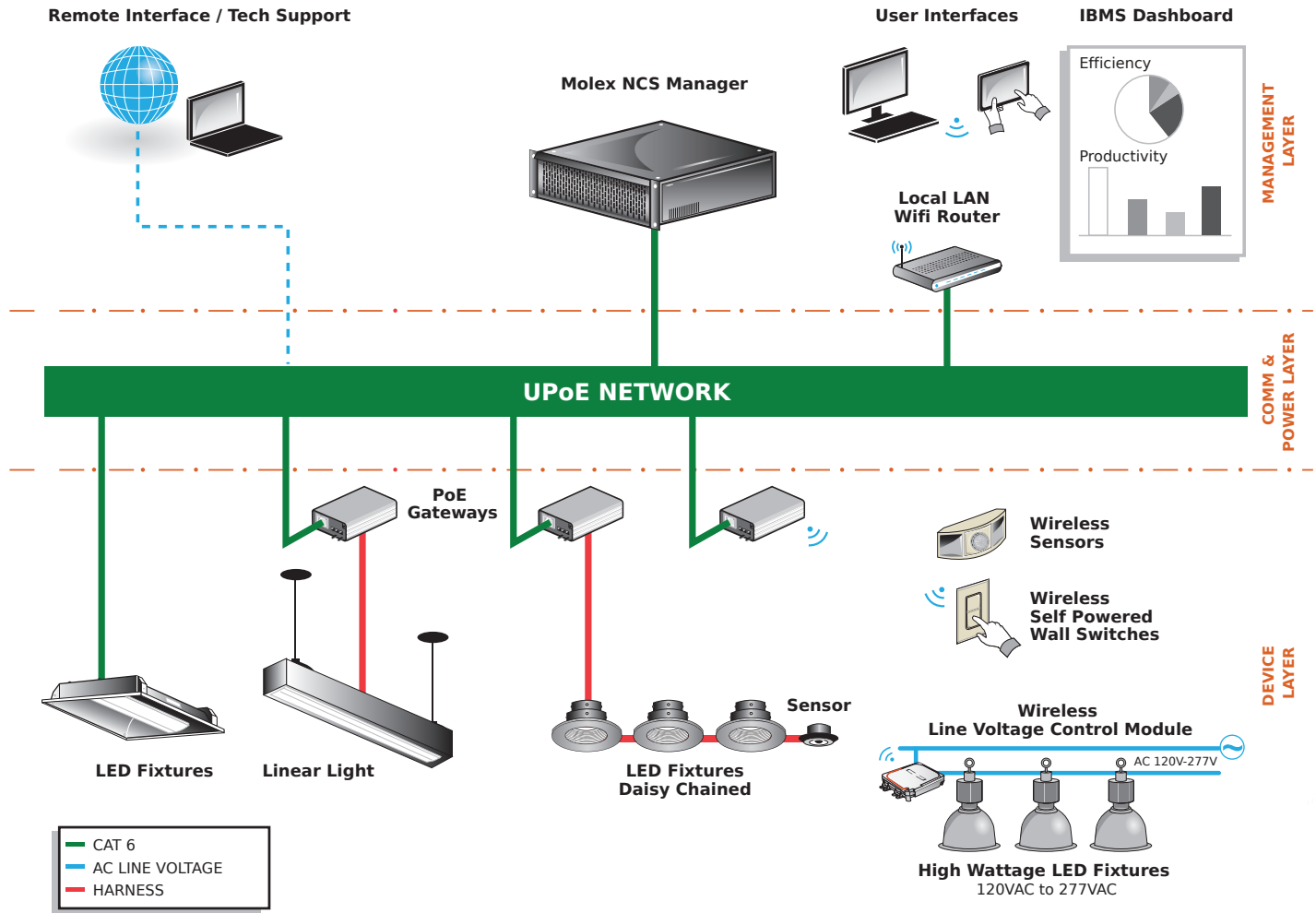|	
fitted with	LED
work equipment	Molex
connected load	PoE
power consumption	approx. 12.5-50 W
luminous flux	approx. 1500lm - 6000 lm
luminous efficacy	approx. 119 lm/W
light distribution	direct/indirect, direct, indirect
direct ratio	40 % direct, 100% direct, 100% indirect
light color	3000K, 3500K, 4000 K, VTL (3000-5400K)
color rendering index (CRI)	> 80
consistent white light of	< 3 SDCM
glare-free	conical prismatic screen
luminance	< 2600 cd/m²
unified glare rating	< 16
system of protection	IP 40
technology	power over ethernet
usage	internal PoE Driver
luminaire body	sectional aluminium, white acrylic clear
lamp cover	approx. 4.1 kg, 9.03 lb
weight (net)	approx. 1,0 m; with free stranded wires
mains lead fastening	steel cable 0.3 - 0.7 m, 1 - 2.3 ft
dimension	nominal 2ft, 3ft, 4ft, 5ft, 8ft, linear-x

Luminous Intensity

Dimensions (in mm)
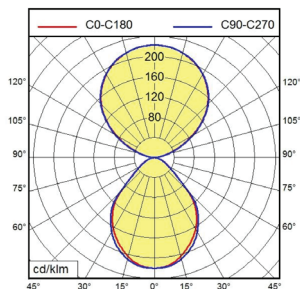
DOTOO -	L	-	-	-	-	POE	-
Type	**Mounting**	**Distribution**	**Length**	**CCT**		**Voltage**	**Color**
	Linear Pendant - L	Indirect/Direct - ID	(Nominal)	3000K - 35		Power over	White - W
		Indirect Only - I	2 foot - 2	3500K - 35		Ethernet -	Black - B
		Direct Only - D	3 foot - 3	4000K - 40		POE	Gray - G
			4 foot - 4	2700 - 5700K - VTL*			
			5 foot - 5	*(Only available in 4ft increments)			
			8 foot - 8				
			LNx - enter x feet				
			in increments of 4ft				

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SYSTEM ARCHITECTURE ❯

Remote Interface / Tech Support

Molex NCS Manager

User Interfaces

IBMS Dashboard

Efficiency

Productivity

Local LAN Wifi Router

UPoE NETWORK

PoE Gateways

Wireless Sensors

Wireless Self Powered Wall Switches

Wireless Line Voltage Control Module

AC 120V-277V

Sensor

LED Fixtures   **Linear Light**

LED Fixtures Daisy Chained

High Wattage LED Fixtures
120VAC to 277VAC

— CAT 6
— AC LINE VOLTAGE
— HARNESS

WHY PoE LIGHTING?

• Power and data over single-layer infrastructure

• Safe and cost effective to install

• Based on Ethernet standard

• Future proof and upgradable

• Human centric control with tunable luminaires

• Lights can be used to communicate information to users

• Can be integrated with other systems

• Highly secure

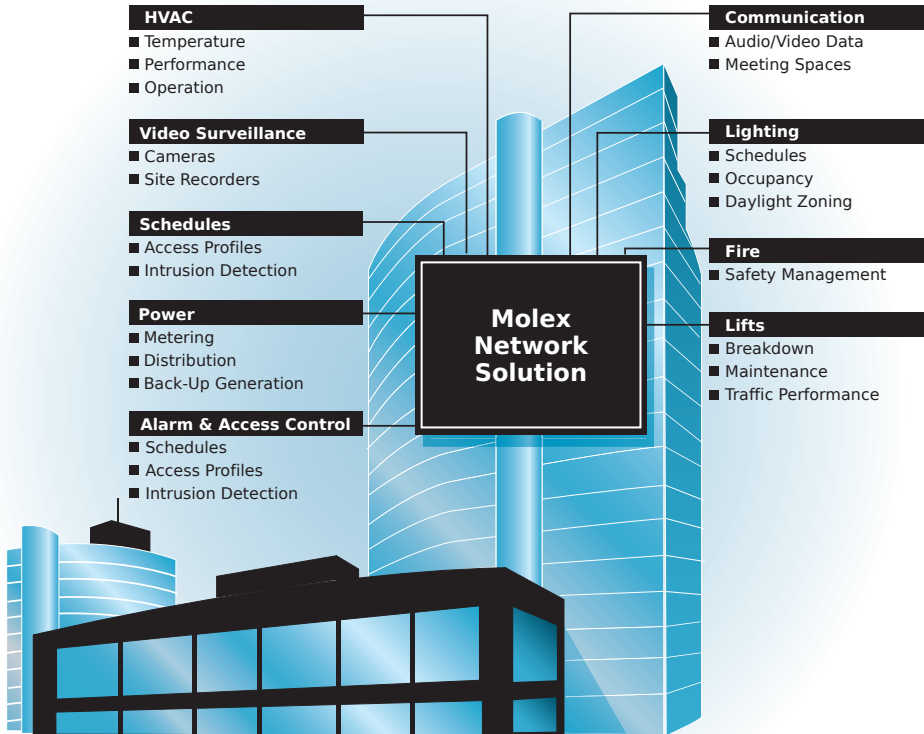• Creates the possibility for new data analytic schemes

Waldmann **W**

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A NEW LIGHTING PARADIGM ❯

Lighting as a Service for Integrated Smart Buildings

The ability to migrate lighting controls to IP-based infrastructure makes lighting a service and an IoT building asset that can be controlled synergistically along with other building functions.

More integration means not only better control, but also more data and information being collected by a distributed sensor system as part of the lighting network.
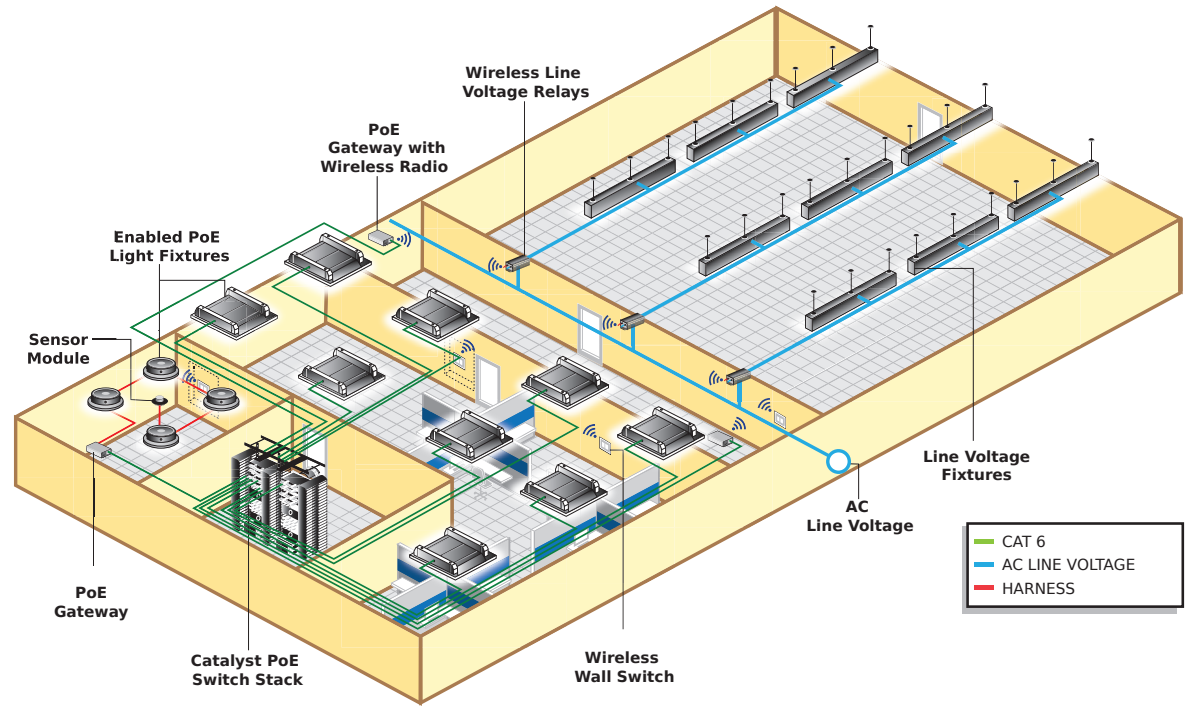
Molex Network Connected Lighting will dramatically accelerate the integration of the IoT into commercial buildings.

HVAC
- Temperature
- Performance
- Operation

Video Surveillance
- Cameras
- Site Recorders

Schedules
- Access Profiles
- Intrusion Detection

Power
- Metering
- Distribution
- Back-Up Generation

Alarm & Access Control
- Schedules
- Access Profiles
- Intrusion Detection

Communication
- Audio/Video Data
- Meeting Spaces

Lighting
- Schedules
- Occupancy
- Daylight Zoning

Fire
- Safety Management

Lifts
- Breakdown
- Maintenance
- Traffic Performance

Molex Network Solution

Efficiency

Occupant Satisfaction

Productivity

Analytics

Space Optimization

WHY MOLEX: Together with leading construction engineering firms, Molex designs and optimizes solutions to improve operational efficiency and performance and to enhance occupant experience and productivity in offices, learning or healthcare facilities, hospitality, retail settings, industrial buildings, and others.
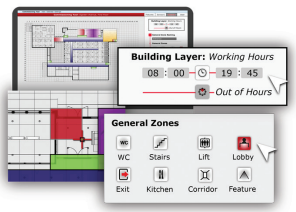
In the important area of LED lighting, we have worked with lighting fixture innovators and leaders, lighting designers and architects to develop connected solutions that define a new level in sustainability, ROI, property value and brand recognition.

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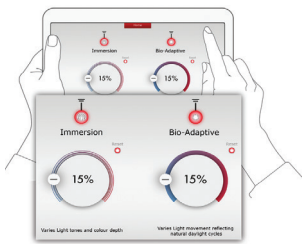ENGINEER OF LIGHT.

SYSTEM ARCHITECTURE ❯

Wireless Line
Voltage Relays

PoE
Gateway with
Wireless Radio

Enabled PoE
Light Fixtures

Sensor
Module

Line Voltage
Fixtures

AC
Line Voltage

PoE
Gateway

Catalyst PoE
Switch Stack

Wireless
Wall Switch

CAT 6
AC LINE VOLTAGE
HARNESS

Smart Building Manager

DESIGN	CONTROL	MANAGE	REPORT

DESIGN

Building Layer: *Working Hours*
08 : 00 — 19 : 45
Out of Hours

General Zones
WC   Stairs   Lift   Lobby
Exit   Kitchen   Corridor   Feature

Define spaces
Fixtures
Sensors
Create zones
Schedules

CONTROL

Immersion   Bio-Adaptive
15%   15%

Immersion   Bio-Adaptive
15%   15%

Varies Light tones and colour depth   Varies Light movement reflecting natural daylight cycles

Responsive control
Dynamic scenes
Intuitive user interfaces

MANAGE

Facility Manager Tool
Overview   Building Layer   General Zones   User Zones
Break-out Zones   Lift Zones   Desk Zones

Meeting Zones / All

Key
Occupied   6 Zones
Available   2 Zones
OFF   0 Zones
Errors   0 Zones

Live data feedback
Light status
Building overview
User zones

REPORT

Business Chart - Visual
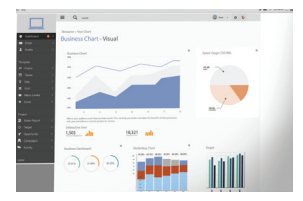
Energy savings
Occupancy status
Building analytics

A FULL SYSTEM SOLUTION WITH THE NCS ALLIANCE ❯

LIGHTS

The freedom to choose from a large variety of Waldmann NCS-ready lighting fixtures through our Alliance Partnership with the Molex Network Connected Solutions PoE system offers unique flexibility to meet lighting requirements without compromising aesthetics.

GATEWAYS

At the heart of the Molex Network Connected System, the PoE Gateway distributes power and connects luminaires, sensors and other devices to the NCS Manager. Each Gateway is connected to a Cisco® switch port with a Category cable, capable of receiving 60 watts using four pairs.

NETWORK EQUIPMENT

As a Cisco® Solution Technology Integrator, Molex integrates Cisco switches into the system.

NCS MANAGER

The Lighting Software Tool-set, leveraging amBX Smart Core technology, provides support during the complete lifecycle of a smart lighting control system, from design and installation to live operation and building maintenance. When compared to traditional methods, the Light Tool-set provides effective lighting in a fraction of the time.
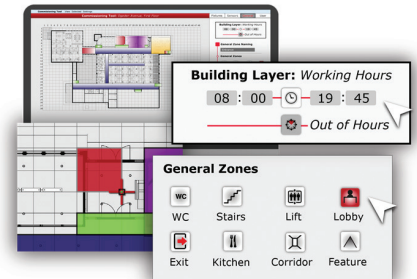
SENSORS

Molex's Lighting Control provides an array of applications that enable the digital building. These applications feed multi-sensor information and data to a central host providing building analytics and applications: real time energy consumption, light status, temperature and humidity, occupancy, air quality, plus many more use cases.

LUX LEVEL   **PRESENCE**   **AIR QUALITY**   **POWER**   **COLOR TEMP**   **ON/OFF**   **TEMPERATURE & HUMIDITY**