interact Office



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with connected lighting, sensors and software apps

Find out more about Interact www.interact-lighting.com/en-us/what-is-possible/interact-office Interact Office turns any office into a smart office by delivering value to all stakeholders

"l need to lower my operational costs and save as much energy as possible"

"I want to optimize my space by tracking occupancy rates"





"Maintenance of a connected system has to be minimal and easy"

"I wish it were simpler to manage my lighting or upgrade it"

From corporate real estate managers, to building owners and facility managers, and even to employees, Interact Office brings value to everyone. Simply install LED connected lighting with embedded IoT sensors, and use Interact Office software and insights to optimize operations, enhance building and employee performance, and help increase employee engagement and well-being. Use Interact Office software and system architecture to contribute to energy and maintenance cost reductions, better space management, possible reduction in rental or cleaning costs, all while helping keep your employees more satisfied and comfortable.

"Upgrading must go smoothly



"I wish I didn't have to waste so much time finding a desk



Optimize operations



Enhance building and employee performance

Your challenges

What Interact delivers



Source: http://bit.ly/19percentenerg

 Combined savings from LED lighting, occupancy sensor, daylight harvesting, personal controls and control of Variable-Air-Volume (VAV) HVAC installations (Source: J. Zhang, R.G. Lutes, G. Liu, M.R. Brambley, Energy Savings for Occupancy-Based Control (OBC) of VAV Systems, January 2013). Source: https://www.cbre.com/research-and-reports/apac-space-utilisation-thenext-frontier

4. Source: https://www.interact-lighting.com/global/customer-stories/the-edge

 Source: International Facility Management Association, Benchmarks V report #30, 2008; based on \$1.62/ft² inflation adjusted cleaning cost.



Increase employee engagement and well-being

Your challenges

What Interact delivers



- 1. Source: http://bit.ly/ConfBooking
- 2. Source: http://bit.ly/15minWasted
- 3. Source: http://bit.ly/20percentmtgrooms

4. CABA Boutique Multi-Client Research Project "Improving Organizational Productivity with Building Automation System

- 5. Lan L. Wargocki P. Wyon DP. Lian Z. (2011) Effects of thermal discomfort in an office on perceived air quality, S
 - symptoms, physiological responses, and human performance. Indoor Air 21:5, pp 376-9

Build the solution that brings you the most value

Colored shading of windows in the diagram below indicates how much value and savings Interact Office brings compared to other lighting control systems.

Example based on a San Francisco location (100,000 sq ft installation) Class A Office building type whose operational expense can be categorized as 1% spend on energy, 9% spend on space and 90% on employees.



1. Productivity savings based on: 0.5% to 1.5% productivity increase; average for different job types and median salaries in San Francisco.

2. Operational savings based on: Assumed 10 minute savings / day on failure identification, system health check & functionality status. Cleaning savings of \$8/ 100 ft² (Source: International Facility Management Association, Benchmarks V report #30, 2008).

Across all regions, only 13% of organizations utilize their space more than 80% of the time. 37% of workplaces globally were empty during any given workday in 2018. A 2015 report from CBRE shared similar utilization rates globally: 40% of all office space was empty. Targeting a utilization of 80% is expected to result in \$8.5/ft² savings.

3. Energy savings based on: Savings from LEDs and sensors. Assumed \$0.15 / kWh avg utility cost. Source: http://bit.ly/2y4lgeZ.



Increase employee engagement and well-being

Breakdown of benefits and features of Interact Office compared to other lighting control systems.

Who benefits	Values delivered	LED with no controls	Standalone 0-10V system / SpaceWise	Networked DALI system / Dynalite	Interact Office
	Productivity	-	-	-	 Way finding Meeting room scheduling Desk reservation
Employers, Employees	Engagement & Experience	-	-	• Dynamic lighting	 Dynamic lighting Personal control Branding Location based services
	Comfort	-	 Quality of light Background level dimming Dwell time 	 Quality of light Background level dimming Tunable White Dwell time 	 Environmental quality (light, temperature, humidity, noise) Background level dimming Tunable White Dwell time
2	Space optimization & Building efficiency	-	-	-	 Desk level accuracy People counting Occupancy heat map
lers, Building owners elopers, Investors, acility Managers	Operational efficiency	-	-	 BMS and other building integration Monitor, manage, control, maintain 	 BMS and other building integration with open API Monitor, manage, control, maintain Real time and historic data Pay for maintenance as needed (eg. cleaning) Prescriptive maintenance with granular fixture level data
E Devio	Energy savings (see energy savings footnote on previous page for details)	• On, Off	 On, Off, Dimming Scheduling Zoning Occupancy sensing Daylight harvesting 	 On, Off, Dimming Scheduling Zoning Occupancy sensing Daylight harvesting 	 On, Off, Dimming Scheduling Zoning Occupancy sensing Daylight harvesting
Total operational	Total savings (see chart on previous page for savings details)	\$0 \$0 \$49,000	\$0 \$0 \$68,000	\$140,000 \$2,000 \$73,000	\$420,000 \$860,000 \$83,000
potential	Payback*	5-6 years	2-3 years	3-4 years	2-3 years

This example is only for reference purposes and is based on certain assumptions & luminaire choices in a typical project.

Contact your Signify representative for a free evaluation of your project and to find out which is the right solution for you.

* Payback calculation based on equipment & Software only, excludes installation and rebates for a typical office scenario listed on previous page. Payback includes a 2 year data collection period for productivity benefits.

Day in the life of an office worker

What would a day be like for an office worker with Interact Office installed in your building?

11:50am

Lights flash as a visual cue that the scheduled meeting time is coming to an end.

Sunset room booked for 1 hour





Day in the life of a facilities manager

Empower your facilities manager to run your building more efficiently.





How we deliver

The Interact portfolio of tailor-made software applications unites connected lighting systems and the data that those systems collect with your intelligent building.



_ighting management

Monitor and manage your lighting across multiple floors, buildings or campuses from any location. An intuitive dashboard affords insight into lighting usage, and lets you remotely optimize your lighting to reduce operational costs.



Lighting asset management

Good quality, reliable lighting is essential for employee comfort, performance, and safety. Interact Office can monitor and manage lighting performance across your entire real estate portfolio. A remote diagnostics dashboard displays notifications of faults and outages for immediate response, while real-time performance data supports predictive maintenance.

Energy optimization

Energy-efficient LED lighting and smart lighting control minimizes lighting energy usage and helps you achieve your sustainability goals. Data collected over the connected lighting system offers insight for reducing CO₂ emissions and lighting energy costs. Daylight harvesting and occupancy detection let you reduce lighting and other services when not needed.

Scene management

Set light schedules, dimming programs or stimulate employee well-being by supporting employee well-being by supporting individually personalized lighting via a smart phone app. Employees can use different light recipes, where appropriate, for concentration and brainstorming.





Interact Office dashboard

Monitor, manage and optimize lighting across your entire office portfolio from a single Interact Office dashboard. Greater Insight and transparency across your organization enables you to optimize operations and costs while improving sustainability.



Interact Office APIs

Open APIs for third-party software applications enable the integration and utilization of information such as realtime occupancy, with other data sources. And a software development kit (SDK) allows Indoor navigation to be enabled in any third-party apps.



Space management

Capture and analyze building occupancy data to give you insight into how your office space is used over time so you can create a workspace that truly meets the needs of your business. Lower real estate costs without compromising workplace efficiency or employee comfort and satisfaction.

Indoor navigation

Where's the nearest free workspace or meeting room? What about the coffee machine? Interact Office Indoor navigation uses the lighting infrastructure, real-time indoor positioning data, and a smartphone app to guide employees to where they want to go. Hyper-accurate indoor navigation enables countless new applications to save employees' time and improve their experience.



Bio-adaptive lighting

Helps you get the best out of your biggest investment; your people. Different levels of light intensity and color temperatures can support well-being, help to energize staff and enhance performance by aligning with the body's circadian rhythm.



Environmental monitoring

Lets you remotely monitor and manage temperature, humidity, and noise levels across your offices and optimize conditions for employee well-being and comfort.





Lighting management

Monitor and manage your lighting across multiple floors, buildings, or campuses – locally or globally.



Lighting asset management

Monitor and manage the performance of your lighting across your entire office.

- Reduce your operational costs by remotely optimizing your lighting through overrides, commissioning, etc.
- Remote diagnostics help you plan maintenance efficiently and detect/ respond to faults or outages
- Automatically deploy firmware and software updates and upgrades
- Reduce maintenance costs, no need to replace batteries as sensors are powered from the lighting infrastructure





Energy optimization

Get an in-depth understanding of how lighting energy is being consumed over time across one or multiple sites

- Up to 85% of energy savings from LED lighting, integrated sensor & HVAC integration*
- Use comparative date to benchmark and create opportunities for CO₂ emission reductions and cost savings
- Reduce lighting and other services when they're not needed via daylight harvesting and occupancy detection
- Qualify your buildings for recognition through Green Certifications for optimizing your energy usage
- Enhance your brand image as a partner in sustainability with the optimization energy usage





Scene management

Scene management that lets you set light schedules or dimming programs

- Use scheduling and dimming to create a better office environment without wasting energy
- Enhance employee well-being by supporting individually personalized lighting via intuitive apps or by changing lighting parameters
- Provide employees with different light recipes for concentration and brain storming



Floorplan of occupancy heatmaps with live occupancy (free vs. occupied) Get desk level accuracy.







Space Management

Use occupancy and people counting data from data from the connected lighting system to learn which rooms and areas are occupied and how many people are using those spaces at given times. Optimize how space is utilized based on new insights.

- Optimize the amount of space per employee by over 35% while improving employee comfort and satisfaction*
- Lower your real estate costs by effectively monitor the space being used in your office building or sites
- Drive strategic decisions for your building space based on data rather than assumptions
- Determine granular utilization information for workstations
- Use data to plan for the future
- Plan for right sizing of meeting and collaborative spaces with people counting data



Welcome video that can be customized to brand preference

Example of a kiosk screen that can also be wall mounted. Our software is agnostic to the hardware used.



Availability of desks and booking function (optional)



Kiosk App for Indoor Navigation

Kiosk application allows employees or guests within your office access to a map of your building and/or floor to easily identify and search for locations.

- Uses lighting infrastructure and real-time occupancy date to guide your employees wherever they need to go
- Enhance efficiency amongst your building occupants through streamlining the search process for points of interest, like meeting rooms, elevators, dining areas, etc.
- Interactive touchscreen enables building occupants to search for points of interest and reserve desks, providing them with the tools to improve their productivity.



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Workspace App for Indoor Navigation and Scene Management

Workspace application gives employees the option to utilize the functionality of the Kiosk Application on their smart phones with the workspace app. Use the app to enhance employee well-being by supporting individually personalized lighting for concentration and brainstorming. Aid employee efficiency by providing them the ability to easily search for desks, book meeting rooms, and locate other important points of interest all from their smart phone.

- Strengthen your brand as you demonstrate that your business puts employees in control of their environment
- Increase employee efficiency with a personalized App experience to aid in daily activities like booking a meeting or work space



Bio-adaptive lighting

Adjust light intensity and color temperatures to help enhance well-being or performance

Benefits:

- Use different levels of light intensity and color temperatures to get the best out of your biggest investment: your people
- Support well-being, help to energize staff and enhance performance by aligning lighting with the body's circadian rhythm
- Contribute to concentration or creativity with activity focused light recipes





Environmental monitoring

Remotely monitor and manage temperature and humidity levels across your offices.

- Collect data on temperature and humidity levels in the office via sensors embedded in the connected lighting system
- Ensure the optimal office environment to help keep employees healthy, comfortable and productive

The building blocks of a connected landscape

The system architectures of both the wired and wireless offerings are shown on the next spread, but here is a close up look at the building blocks of Interact Office. Whether your need is to make your existing space smart or wire a new business from scratch, Interact Office is your solution.

		Wired (PoE)	Wireless			Wired (PoE)	Wireless
loT devices				User interfac	es		
0	Occupancy and light sensors		\checkmark		Antumbra control panels are wall-mounted user interfaces that allow lights to be turned on/ off and dimmed, or light scenes to be activated.	\checkmark	
	Temperature and humidity sensors		~		Wireless switches are self-powered wireless devices that provide a manual override capability for luminaires and don't require batteries or power wires		\checkmark
	People counting sensor	\checkmark	\checkmark	(Interact-ready wireless Iuminaires provide illumination and enable the		
Control gear					digital canopy. Sensors may be integrated to		\checkmark
	Building connectivity bridge		\checkmark		measure occupancy rates, daylight levels and temperature.		
	Wireless gateway		 Image: A start of the start of		Interact-ready PoE Iuminaires transmit low voltage power is over existing Ethernet cables to operate the luminaires, while high volumes of data are sent and collected.	\checkmark	
	Ethernet gateway -			Software			
	Ethernet connection to a lighting control system. It supports access to the connected lighting via an app and web interface.	\checkmark			Interact Office software, with graphic user interface captures all data from luminaires to provide a performance		
· · · · · · · · · · · · · · · · · · ·	PoE switch – provides electricity to the luminaires and routes sensor data within the connected lighting system	\checkmark			report card that can support informed business decisions.		
	Connected lighting server - collects, stores and processes all information about the connected lighting system.	~			IoT apps Allow users to control the lighting in the space, and use insights to create a workspace that truly meets your business needs.	\checkmark	\checkmark

Interact Office wired (PoE)

System architecture ideal for new construction and deep renovation

Power over Ethernet (PoE) technology is one of the key avenues of connected lighting systems that can help your building to be more smart and efficient. In PoE technology, low voltage power is transmitted over ethernet cables to operate luminaires as well as send and collect high volumes of data.



Interact Office wireless

System architecture ideal for retrofit

Interact Office wireless is perfect for remodeling of your space or when running new wiring is not ideal. It utilizes a lean on-site hardware infrastructure that allows for future upgrades and expansion. It functions via a cloud-based system enabling virtually unlimited growth of connected sites and data flow.



Interact Office in action

"The Edge is now the cheapest office in the world for Deloitte. They have added nearly 1,000 workers to the space and have four times more applicants than before."

Erik Ubels, former CIO, Deloitte



The Edge

Amsterdam, the Netherlands

Creating a sustainable office building

The vision: The Edge is an innovative, multi-tenant office building in the Zuidas business district in Amsterdam. The project's main design goal was to create an intuitive, comfortable, and productive environment for employees that could serve as inspiration for sustainable building designs around the world.

The solution: Working closely with a Dutch realestate business and the lead tenant, Deloitte, we delivered a connected lighting system using cutting-edge IoT technologies. This enables data collection and insight over customized software applications, which can be used to enhance the flexibility of the open-plan office. Since moving to the Edge, Deloitte has seen a fourfold increase in applications for job vacancies.



6.500 PoF luminaires over 15 floors, 3,000 with integrated sensors





Savings per year in space optimization compared to previous location



4x More applicants than before for Deloitte



\$115ĸ

Expected savings in energy costs per year

"Innovation is our highest priority and we want to raise the bar in terms of data analysis, delivering new insight into the use of the office space. It shows how we can reduce CO₂ emissions from buildings and create a more sustainable world."

- Eric Ubels, former CIO, Deloitte

Explore more customer stores: www.interact-lighting.com/en-us/customer-stories



Hamdan Bin Mohammed Smart University

United Arab Emirates

Maximizing performance through connected lighting

The vision: HBMSU aims to provide the smartest learning ecosystem among all education institutions world-wide. With technology forming the basis for instructional delivery, it is the catalyst for creating a smart and adaptive learning environment. The university is also supporting the government's vision for Dubai to be the smartest city in the world.

The solution: To achieve their goal, the university was equipped with state-of-the-art connected LED lighting with embedded sensors, managed and controlled by Interact Office software. Notably, the university does not have any light switches. All lighting is controlled either via a smartphone app, by motion sensors or through a central management system. The lighting also automatically adjusts to outdoor light levels.



600 connected luminaires



UP 60% reduction in connected load



Real-time indoor positioning data helps students find available rooms or lead them to their classes



15% saved on energy bill

The Interact Office software system is integrated with the university's building management system so that all building systems work together seamlessly. Sensors detect presence and the lights switch on as students enter the room. Once students vacate the room, the HVAC and lighting are switched off.

Compatible lighting

by (signify)	Luminaire Family (click name for details)	InterAct Office Wired (PoE)	InterAct Office Wireless*	
	ArcForm	¥*	¥*	
	BoldPlay	~	¥*	
The	FloatPlane	\checkmark	¥*	
	Sona	¥*	¥*	
$\langle \rangle$	SilkSpace and SilkSpace definition	¥*	¥*	
	TruGroove recessed	~	¥*	
	TruGroove suspended	>	¥*	
	TruGroove recessed micro	* *	¥*	
	EyeLine**	¥*	¥**	
	ModiFly	~~~	V*	•

Day-Brite by ©ignify	Luminaire Family (click name for details)	InterAct Office Wired (PoE)	InterAct Office Wireless*
\checkmark	ClearAppeal	<	\checkmark
	DuaLED	Consult Factory	\checkmark
	EvoGrid	~	~
	FluxGrid	\checkmark	~
$\langle \rangle$	SofTrace LED	~	~
2	FluxStream strip	\checkmark	~
	FluxStream industrial		~
	FluxStream wraparound		~

/ Option is mentioned on the spec sheet

Option is not on the spec sheet but can be implemented as ETO

LIGHTOLIER by ©ignify	Luminaire Family (click name for details)	InterAct Office PoE	InterAct Office Wireless*
	Calculite gen3**	~	~
	LyteProfile**	~	~
	EasyLyte**	~	\checkmark

PHILIPS	Luminaire Family (click name for details)	InterAct Office PoE	InterAct Office Wireless*
	EvoKit		~
	MasterConnect TLED		~

Don't see the product you're looking for? Contact enterprise@signify.com to discuss your project needs.

* Only FluxGrid, EvoGrid and Evokit are considered as a standard offering, all other supported offerings are considered custom with longer lead times. ** Sensor is remote.

Lighting for your business, made easy

Signify is leading the way with customized lighting services that provide the quality of light your business deserves. We offer various packages of services to ensure we can provide just what you need. See a summary here, and explore them at www.signify.com/global/lighting-services

Professional Services

Whether you're updating your luminaires or undertaking a complete system redesign, we can help transform your lighting to work for both you and your business.





Consulting

Lifecycle Services

Lighting is an important part of your business. That's why we offer customized maintenance plans to keep your lighting system working at its best over time.

Managed Services

From the initial design and installation to operation and maintenance, we've got you covered. You can focus on what you're best at – taking care of your business



How do I get Interact?

The Interact team is anxious to help you begin the journey towards optimizing your operations, enhancing building and employee performance, and helping to increase employee engagement and well-being. Take the first step today!

Request further information, a quote, webinar, or pilot: interact-lighting.com/en-us/get-in-touch

Find out how Interact can transform your business www.interact-lighting.com/en-us/what-is-possible/interact-office

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