



ENSTO

Ensto AVR320 SmartWay Light that learns

Case: Ringvägen

Better life.
With electricity.

Ensto SmartWay

Self learning lighting



AVR320 SmartWay predicts movement and sends this information to all nearby luminaires, switching the lights on and off as you move.

AVR320 SmartWay luminaires communicate with each other wirelessly, with no need for control wires or radio control equipment, and they are ready for use without programming. The luminaires track the movements of the occupants of the building, communicate with each other and learn the habits of the occupants, creating the most user-friendly smart lighting system on the market.

The AVR320 SmartWay solution combines conventional motion detection technology with an innovative master/slave concept that allows for wireless communication without control wires or programming. The luminaires can communicate with each other irrespective of the phase they are connected to.

The luminaires are self-learning, and the smart features start working as soon as they have been installed. They learn continuously about the movements of the people using the building, adapting to any changes.

Ensto SmartWay

Ensto SmartWay is a self-learning wireless system that tracks movement in hallways, corridors, offices and other locations, adapting its operation to the patterns it detects.

The plug-and-play luminaires are easy to install since they do not require control wires and no programming or configuration is needed.

GTIN	TYPE	PRODUCT NAME	LUMINOUS FLUX
6438389005868	AVR320.1107L/AA	AVR320 IP44 LED10W/840 PIR AA	1082 lm
6438389005875	AVR320.1107L/3K/AA	AVR320 IP44 LED10W/830 PIR AA	1047 lm
6438389005844	AVR320.1147L/AA	AVR320 IP44 LED14W/840 PIR AA	1514 lm
6438389005851	AVR320.1147L/3K/AA	AVR320 IP44 LED14W/830 PIR AA	1466 lm

Default settings of the SmartWay system (suitable for e.g. staircases and basements)

- > Maximum light level > 100%
- > Power save light level > 10%
- > Minimum light level > 0%
- > Occupancy timeout > 1 min
- > Transition timeout > 2 min
- > Fade up time > 2 s
- > Fade down time > 8 s



Watch our SmartWay video on YouTube



Self-learning lighting

Ensto's SmartWay is arguably the most human-centric lighting solution on the market. It continuously maps the movements of the occupants of the building, learning and adapting its operation based on the habits of the occupants. If one of the occupants takes their dog out for a walk at 7am every morning or if the postman usually arrives at 9am, the luminaires adapt effortlessly to these patterns.

The Ensto SmartWay solution has been in use at Ringvägen for a few months now, and its installer has made some interesting observations on the things the luminaires have learnt so far: "When using the stairs to reach the fifth floor, I noticed that the luminaires were unable to predict my movements from the second floor onwards. This shows that the people who live on the lower floors tend to use the stairs, while those living on the upper floors take the lift."

Luminaires with the ability to learn

The Ensto SmartWay solution used for Ensto's AVR320 luminaires utilises ActiveAhead – a wireless Bluetooth Low Energy Mesh technology developed by Helvar. It is the first self-learning light control solution used in luminaires. The solution uses artificial intelligence, and it features the first smart PIR motion detection and light sensor on the market.

"This plastic 'UFO' houses state-of-the-art technology," explains Marketing Manager Paavo Ritola from Ensto Lighting. He says: "It has the ability to learn, and it keeps learning throughout its service life."

At home in Stockholm

This block of flats in Stockholm is the first residential property in the world to benefit from a SmartWay staircase lighting system. 28 SmartWay luminaires have been installed in the staircases and short corridors of the six-storey block, owned and managed by Stockholmshem and located at Ringvägen in the Södermalm district of city.

"As a company, we want to be at the forefront of innovation and new technology," says Stockholmshem's Technical Expert Roger Modig. He manages the housing company's 26,000 rented properties located in 1,000 different buildings across Stockholm.

The SmartWay solution was installed as a replacement for fluorescent tubes that were reaching the end of their life, and Modig expects the new solution to be at least 60–70% less expensive to run than the old system. "These luminaires last for 70,000 hours, or around 20 years, and they are practically maintenance-free," he says.

Smart installation

SmartWay luminaires are designed to be easy and quick to install. Anders Bergström from Svealands Fastighetsteknik AB (SVEFAB) installed all 28 luminaires in one day.

"Installation was really fast because no additional preparations were needed," he explains, continuing: "The luminaires communicate with each other without any additional cables or wiring. I could install them in the same two holes as the old light fittings, and earthing wasn't

needed because the AVR320 luminaires are double-insulated and made of plastic. The SmartWay solution is pre-programmed in the luminaires, so it does not need to be switched on."

During the bidding process, contractors estimated in their budgets that installation would take 45–60 minutes per luminaire. Although he is more experienced than most installers, Bergström needed only 20 minutes per luminaire.

Ensto listens and learns

Roger Modig from Stockholmshem says that Ensto won the contract not only because they were the only company who could offer an AI-assisted product, but also because they were known as a reliable partner. "I have been in this industry for 30 years, and my relationship with Ensto is almost as long," says Modig.

Modig concludes: "I like Ensto because they listen to their customers and learn from their feedback." Just like SmartWay.





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