NEW

Hyperion 3D

Smart energy saving solution for industrial doors

Smart, self-calibrating, energy-saving

- Intelligent, height-adaptive door control saves up to 64 % energy
- Auto-configuration and mobile app for wireless access to sensor parameters
- Energy calculator demonstrates potential savings

www.bircher.com

Hyperion 3D
Smart energy saving solution to make industrial doors sustainable and intelligent

Energy consumption as a challenge

Thermal energy used for heating and cooling of buildings accounts for almost half of the energy consumption in Europe. Its impact on climate change is tremendous. In industrial environments, open doors generate a large part of energy loss through air infiltration. Energy-efficient buildings reduce carbon dioxide emissions and energy costs at the same time.

Smart solution

Hyperion 3D is the innovative energy saving solution for industrial doors from BBC Bircher Smart Access. The sensor system allows for an automatic and adaptive door opening – the door opens as late as possible and just as much as required to then close as soon as possible. Hyperion 3D can measure, analyse and monitor the size, speed and moving direction of objects as well as differenciate between people and vehicles. It is intelligent – Hyperion 3D commands the door if and when to open, when to stop and also when to close. Energy loss through air infiltration is therefore reduced to the minimum.

Your benefits

Energy-saving

- Prevents unnecessary openings by smart 3D monitoring of door surrounding
- New level of cross-traffic masking and object characterisation
- Precise door opening height for every vehicle or person passing allows for high energy savings
- Energy calculator evaluates potential energy savings

Plug&play installation

- Self-calibrating sensor system automatically evaluates door surroundings and door parameters, e.g. door height and speed
- Highly visible multicolor LED shows operation mode of sensor
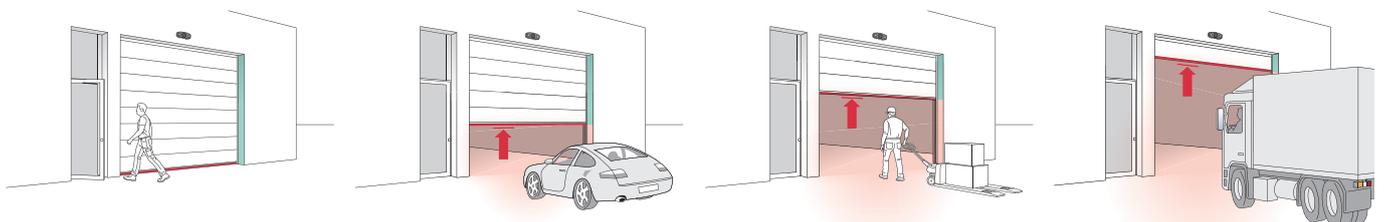- Mobile app to fine-tune settings and visualise door statistics
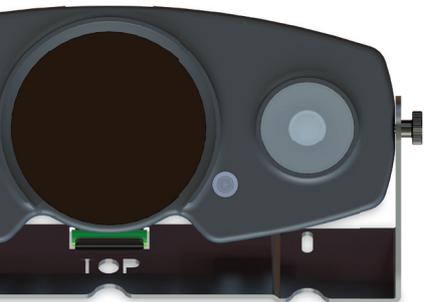
Smart activation

- Different detection and presence zones to meet every application's requirements
- Three-dimensional monitoring of the door on both sides
- Multisensoric system with centralised data analysis and communication with the door control
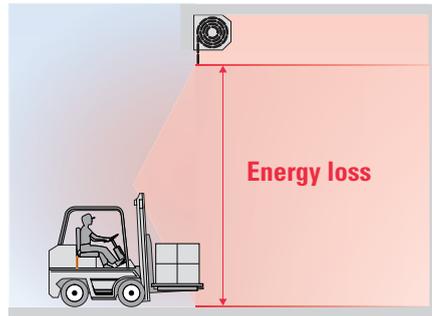
Compatibility and retrofit

- Possibility to connect to every existing standard controller on the market (open, stop, close)
- Easy retrofit of existing doors

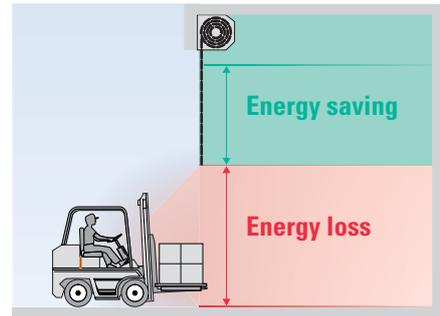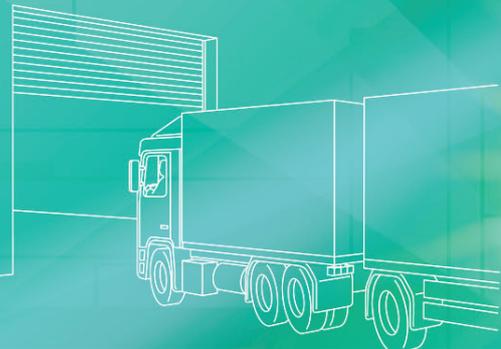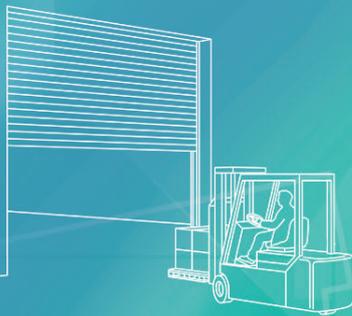## Object identification and height-adaptive opening

Saves energy and money

Without Hyperion 3D: high energy loss

With Hyperion 3D: energy saving = reduced energy costs
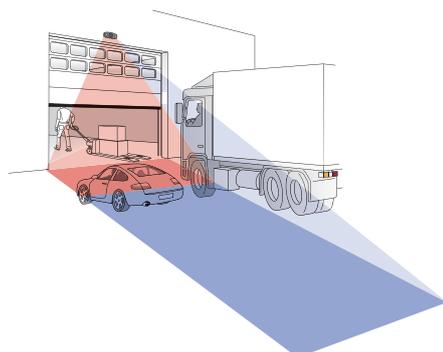
ENERGY SAVER

Energy savings in each application

Situation
- Mixed use (truck, car, forklift)
- Production building
- Sectional door (5 × 5 m)
- 90 cycles per day with 10 seconds hold up time

Benefit
8749 kWh or 46% potential energy saving with Hyperion 3D

Energy saving
46%

Situation
- Forklift use
- Warehouse
- High speed spiral door (4.5 × 4 m)
- 220 cycles per day with 10 seconds hold up time

Benefit
4316 kWh or 57% potential energy saving with Hyperion 3D

Energy saving
57%

Situation
- Truck use
- Logistics center
- Sectional door (5 × 4.5 m)
- 45 cycles per day with 25 seconds hold up time

Benefit
3425 kWh or 25% potential energy saving with Hyperion 3D
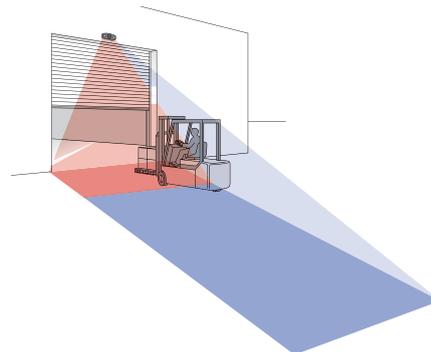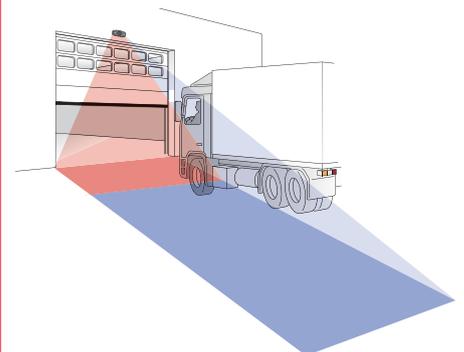
Energy saving
25%

Calculation basics for all situations – Location: Central Europe; operational days per year: 250; heating/cooling time per day: 12 h; heating/cooling factor: 30 W/m²; inside temperature: 18−25°C

Technical data

Mechanical data

Mounting height		2.5 to 7.5 m
Connection type		Cable 12 m, 12 × 0.25 mm²
Housing material	-M/-S	Aluminum, PC ABS GF20
	-H	ABS
Colour		Black
Dimensions	-M/-S	260 × 110 × 55 mm
	-H	135 × 55 × 75 mm
Weight	-M/-S	Ca. 830 g (with mounting bracket)
	-H	Ca. 270 g (with batteries)

Technology data

Technology	-M/-S	Stereoscopy
	-H	Laser Class 1
Detection mode		Motion / presence
Max. detection speed		20 km/h
Outputs		3 (open, stop, close) PhotoMOS 50 mA / 48 V
Pulse lengths (kit-1W)		200 ms
Additional IN/OUTputs		Upon inquiry

Electrical data

Operating voltage	24 V DC ±15%
Power consumption	5 W

System description

Industrial door		Speed 0.1 to 1.5 m/s, height 2 to 10 m
Detection zone[1]	Width	Min. 3 m, max. 2 x mounting height
	Depth	Min. 2 m, max. 2 x mounting height
Presence zone[1]	Width	Min. 2 m, max. 1.5 x mounting height
	Depth	Min. 1 m, max. 3 m

Ambient conditions

Protection class	IP65
Operating temperature	−30° C to +65° C
Storage temperature	0° C to +40° C
Air humidity	0% to 95% relative, without condensation

Standards

2014/35/EG	Low voltage directive
2014/30/EG	Electromagnetic directive
RED 2014/53/EU	Radio directive
EN 62471	Fotobiologic safety
EN 300 328	Electromagnetic compatibility and Radio spectrum Matters (ERM)
IEC 60529:2013	Degrees of protection provided by enclosures (IP code)
IEC 60068-2-64:2008	Environmental testing

Legend

-M/-S = Hyperion 3D-M (Master sensor) / Hyperion 3D-S (Slave sensor)
-H = Hyperion 3D-H (Height sensor)
[1] = Objects up to 0.3 m height are ignored

Note
Technical details and recommendations concerning our products are based on experience and are an aid for the orientation of the user. Details stated in our brochures and data sheets do not guarantee special properties of the products. This does not apply to special product properties confirmed by us in writing or individually. Subject to technical alterations.

Bircher SmartConnect app

For a quick setup and easy configuration of the sensor system. Available in the Google Play Store.

Energy calculator

For calculation of energy savings with individual door parameters.
hyperioncalculator.com

BBC Bircher Smart Access
Wiesengasse 20
8222 Beringen
Switzerland
Phone +41 52 687 11 11
info@bircher.com
www.bircher.com

Order details

Article no.	Description	
354776	**Hyperion 3D-1W (one-way kit)** Consisting of Hyperion 3D-M (with mounting bracket), Hyperion 3D-H, control cable	
354775	**Hyperion 3D-2W (two-way kit)** Consisting of Hyperion 3D-M, Hyperion 3D-S (both with mounting bracket), Hyperion 3D-H, control cable, two way cable	

Accessories

350842	**Hyperion 3D-M** Master sensor with mounting bracket	
350843	**Hyperion 3D-S** Slave sensor with mounting bracket	
358331	**Hyperion 3D-H** Height sensor	
354777	**Mounting bracket** for Hyperion 3D-M / Hyperion 3D-S	
353227	**Control cable** for Hyperion 3D-M	
346547	**Connection cable two-way** for Hyperion 3D-S	
354778	**Weather shield** for Hyperion 3D-M / Hyperion 3D-S	