Process-optimisation systems for production logistics and shipment Easy to retrofit. Ready to use straight out of the box.









signalling devices for logistics and manufacturing applications. A world first – our signal towers can be transformed into intelligent wirelessly connected call and messaging systems. In contrast to conventional andon tools, these not only display faults, but also seamlessly **document and analyse** any malfunctions. This allows you to optimise your

StockSAVER

StockSAVER implements a third-generation kanban system for production logistics. This simple retrofit solution for all FIFO flow racks solves all of the typical issues with Kanban systems, creates considerably more space in production areas for value adding activities and increases cash flow. As StockSAVER provides automatic material replenishment requests, it eliminates the margin for human error and the need for line-side safety stocks.

StockSAVER: THE THIRD-GENERATION KANBAN SYSTEM

First generation Kanban systems: Kanban cards

Problems: delays in handing over cards, cards are mislaid or are not collected, little transparency.

Second generation Kanban systems: Use of scanners

Problems: disruptions due to incorrect bookings, forgetting to scan, incorrect stock

Third generation Kanban systems:



- Sensors determine the actual material stock levels present in the rack.
- Human errors are eliminated and the familiar Kanban problems are resolved (lack of stock is not recognised in good time, Kanban cards cannot go missing etc.).
- This makes it possible to halve the stock level in the FIFO rack.

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- Reduce stock levels and improve your cash-flow • Emergency stocks no longer necessary • Get your safety stock under control, even with a diverse range of parts

REDUCE ERRORS

YOUR BENEFITS

- No duplication of bookings
- React flexibly, in real time

HALF THE NUMBER OF FLOW RACKS

- Halve your FIFO rack area and solve your space problems
- Safety stocks no longer required (without the risk of material running out)
- More space on the assembly line
- Create space for value adding processes

COMPLETE SOLUTION FROM A SINGLE SOURCE

- Fully configured kits (hardware and software)
- Simple commissioning and use (no external project or consultancy costs)
- Intuitive software (standalone or integrated into the company network)



IMPROVE YOUR CASH FLOW

• Solve existing Kanban problems (e.g. Kanban cards being lost) • Scanning processes are no longer required - replenishment is triggered automatically

THE SYSTEM

The fully configured kits for your flow racks are delivered ready for immediate installation. StockSAVER is maintenance-free, easy to retrofit and monitors the stock levels of your FIFO flow racks as a signal point in the logistics chain. The data is transmitted wirelessly and displayed in the software which is supplied with the package. You will also profit from the long-term benefits of the analysis module, which can help you to improve your processes. The material movement data export provides the opportunity to optimise the replenishment process.

StockSAVER - Kits and Part numbers

865.000.0
865.000.0
865.000.0
865.000.04
865.000.2
865.000.3
865.000.3



1	Kit with Transceiver for 50 locations with 2 sensors per location (including software). Contains: 1x Transceiver, 1x SmartBOX, 50 x SensorBOXes, 100 x Sensors
2	Kit with Transceiver for 50 locations with 4 sensors per location (including software). Contains: 1x Transceiver, 1x Smart <i>BOX</i> , 50 x SensorBOXes, 200 x Sensors
3	Kit without Transceiver for 50 locations with 2 sensors per location (including software). Contains: 1x Smart <i>BOX</i> , 50 x Sensor <i>BOX</i> es, 100 x Sensors
4	Kit without Transceiver for 50 locations with 4 sensors per location (including software). Contains: 1x SmartBOX, 50 x SensorBOXes, 200 x Sensors
9	Tool kit contains: 1x Parallel-action pliers 1x Automatic wire-stripper for BUS cable 1x Automatic wire-stripper for Sensor cable
0	Extension set to extend sensor cables when re-configuring locations, Contains: 30 x sensor connectors, 15 x sensor couplers
3	30 m

SmartBOX

Receives the data from the SensorBOXES and transmits this to the Transceiver via a wireless network. **OPTIONAL:** If the universal interface is used (e.g. RFID or barcode scanner), the SmartBOX gives an immediate warning, on site, of misplaced items and requests a correction.

SENSORS

Detect the number of bins and transfer this data to the SensorBOX.

SensorBOX

Receives the sensor status of up to 4 bins per shelf location and transfers this data to the SmartBOX.

- TRANSCEIVER

Receives the status of the SmartBOXES and transfers this data to the StockSAVER software.

AndonSPEED

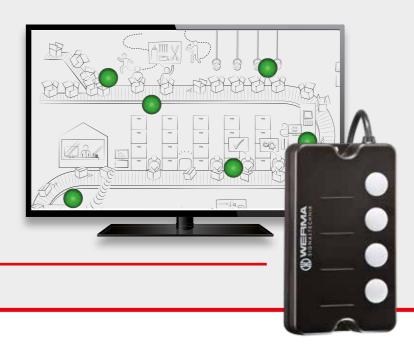
With AndonSPEED you can optimise your processes for manual stations and for packaging and shipping stations. Because AndonSPEED provides a visual display of problem areas – at the push of a button. Permanent time-savings are possible thanks to quick fault correction. The system can also transfer the calls for action wirelessly to a central control station and send e-mail alerts automatically.

Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Quick fault repair enabling more
 "units per hour"

Typical applications

- Report stoppages on chutes or conveyor belts
- Manage the supply of materials to packaging stations
- Report missing items at the shipping station
- Process improvement in shipping areas



- Rol
 for
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- Ability to implement a head-ofline function, for example, with

- Intelligent reporting for lasting
 - improvements
- Optimisation potential is made
 - transparent



Features

- Robust, proven wireless network
 - for production environments
- Licence-free software is included
- Integrated analytics and
 - reporting tools
 - slave control





3. Signal Tower



AndonLIGHT

Provides an introduction to professional call for action systems: the easy-to-retrofit Andon products in combination with WERMA KombiSIGN 72 signal towers. With these products it is easy to improve safety and efficiency in the workplace.

Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Intuitive and self-explanatory light system

Typical applications

- Professional signalisation of problems at the workstation
- Manage supply of materials to workstations
- Optimise processes

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• More reliability and efficiency (no running around looking for help) • It can be expanded to a wireless network system at any time

Features

• Up to eight different statuses • Signal directly on the signal tower with AndonCONTROL • Activate signals on the signal tower with Andon SmartBOX







3. Signal Tower



TRAFFIC LIGHTS

The traffic light range provides effective and reliable signalling in single or combination lights.



Your benefits

- Cost-effective traffic light with LEDs and clear lenses
- Easy installation in just a few steps and with any combination of 4 lights
- RGY version: reduction in number of variants by combining three colours in a single product – Ideal where space is
- 190



restricted

- Additional high-output audible
 - signalling of up to 110 dB(A)
 - available in combination with multi-tone sound-er/vocal alarm
- Extremely robust: available up to IP 69K

Traffic Light

Protection rating	IP 65
Dimensions (Ø x H)	150 mm x 154 mm
Housing	PC/ABS blend, grey
Lens	PC, transparent
Cable entry	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet $Ø$ 6-12 mm, included in assembly.
Connection	CAGE CLAMP [®] 0,5 - 1,5 mm ²
Fixing	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Installation position	As required
Life duration	Up to 50.000 h

890 - LED Traffic Light

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 200 mA	< 35 mA
red	890 120 55	890 120 68
green	890 220 55	890 220 68
yellow	890 320 55	890 320 68

890 - LED Permanent Light RGY

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 220 mA	< 40 mA
RGY (red, green, yellow)	890 480 55	890 480 68

Accessories

FIXING BRACKET

Fixing bracket for one beacon	975 890 33
Fixing bracket for two beacons	975 890 34
Fixing bracket for three beacons	975 890 35
Fixing bracket for four beacons	975 890 37
CONNECTING GROMMET	
Connecting arommet for traffi c light combinations	975 890 25

Nutzen Sie unsere Konfiguratoren unter **www.werma.com**, um einfach die richtige Kombination zusammenzustellen.

Traffic Light

Protection rating	IP 69k
Dimensions (L x H x W)	2 tier: 85 mm x 309 r 3 tier: 85 mm x 394 r
Housing	PC-ABS, grey
Cable entry	Cable diameter max
Fixing	Wall mounting, tube
Connection	Screw terminal 0,5-
Installation position	Vertical/hanging
Duty cycle	100 %
Life duration	Up to 50.000 h

894 - LED Traffic Light

Lens:	PC, clear transparent	
Voltage:	24 V DC	1
Current consumption:	< 60 mA (red/yellow) < 120 mA (green)	< 2
red/green	894 160 55	8
red/yellow/green	894 180 55	8

894 - LED Traffic Light / Siren Combination

Lens:	PC, clear transparent	
Tone type:	Continuous tone	
Voltage:	24 V DC	115-230 V AC
Current consumption LED:	< 60 mA (red/yellow) < 120 mA (green)	< 30 mA per tier at 230 V/50 Hz
Current consumption Siren:	< 20 mA	< 30 mA at 230 V/50 Hz
red/green	494 160 55	494 160 68
red/yellow/green	494 180 55	494 180 68

894 - LED Traffic Light

Lens:	PC, colored transpare	en
Voltage:	24 V DC	1
Current consumption:	< 60 mA (red/yellow)	<
red/green	894 060 55	8
red/yellow/green	894 080 55	8

894 - LED Traffic Light / Siren Combination

Lens:	PC, colored transpare	'n
Tone type:	Continuous tone	
Voltage:	24 V DC	1
Current consumption LED:	< 60 mA (red/yellow)	<
Current consumption Siren:	< 20 mA	<
red/green	494 060 55	4
red/yellow/green	494 080 55	4



115-230 V AC < 30 mA per tier at 230 V/50 Hz < 30 mA at 230 V/50 Hz 494 060 68 494 080 68

nt 894 060 68 894 080 68

115-230 V AC < 30 mA per tier at 230 V/50 Hz

115-230 V AC < 30 mA per tier at 230 V/50 Hz 894 160 68 894 180 68

-1,5 mm²

e mounting (accessory)

x. 13 mm

mm x 136 mm mm x 136 mm





$\label{eq:WERMA} \mbox{Signaltechnik GmbH} + \mbox{Co. KG}$

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05/18 • 990.031.02 •