Réferences et examples de transmission sans fil de signaux (analogiques, numériques et sériels) et d'énergie pour capteurs, actuateurs et valves

Projet Delta Power et Transfer de Dates sur culisse de montage

Projet Thermosavant 4-canal-Mesure de Temperature dans Centrifugeuse

Projet Mesure acoustique envers Systemes de vissage

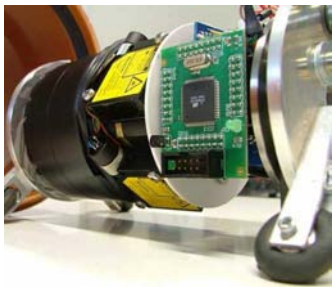
Projet Anneau de Camera Power 100 W pour Systeme de surveillance

Projet Power et transmission de Dates pour Roboter

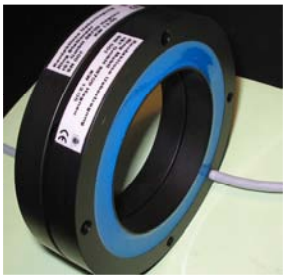
Projet Systeme Vehicule Roboter de vernissage

Projet couplage cascade pour Systemes de Percage

Projet Capteur Terrain avec Transmission rototif

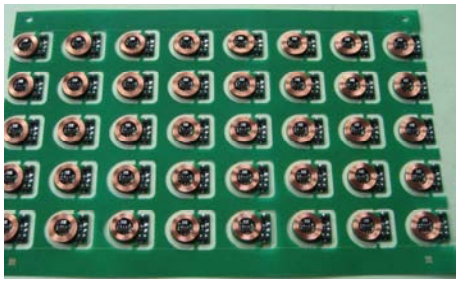


Projet Capteurs en rotation pour Robo de Canalisation

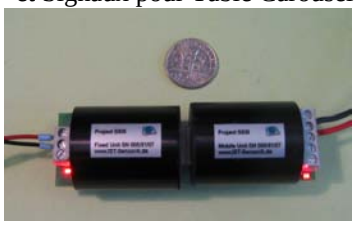


Projet Fibro Transmission Energie et Signaux pour Table Carousel

Projet transmission rotative en Production alimentaire

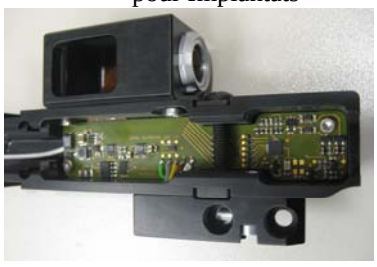


Projet Transmission d'Energie pour Implantats



Projet Systeme de couplage pour Portes de securite

Projet Special Systeme Cammion Transmission trois canaux pour vehicule



Projet transmission Signaux pour Systemes innovatives Armes (NATO)

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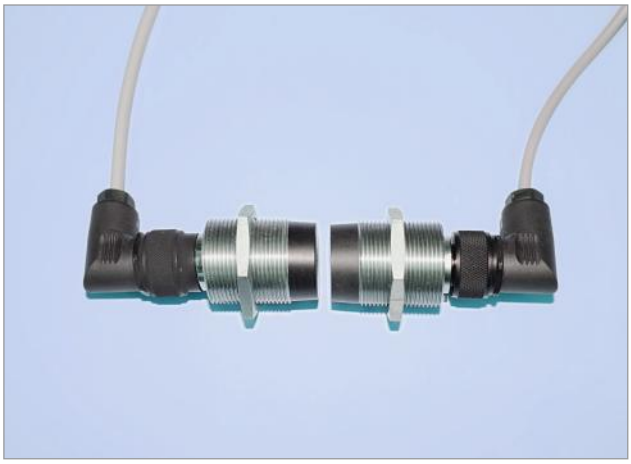
SENSORS AND COMPONENTS
QSS
QUALITY SYSTEMS SOLUTIONS GMBH
Aemet 5
CH-8344 Bäretswil
T +4144 2420000
F +4144 2420010
www.qss-solutions.ch
info@qss-solutions.ch

Inductiv Coupler ALPHA

Wireless power transmission system

application example: supplying system



working arrangement of coupling devices

Functions

Wireless power transmission system.

Power transmission automatically starts when both inductors are located inside the defined position. LEDs in mobile and stationary unit indicate control and transmission status.

Integrated electronic components control power supply while on/off switching may be used as 1bit signal transmission.

Features

- „Plug and Play“
- status LED
- mobile unit output power 4.8W/24V
- air gap 0 – 4mm
- short-circuit-proof
- integrated surge voltage protection
- integrated reverse polarity protection
- transmission dead time approx.1 ms
- IP Code 67 as standard; IP 68 available on request
- plug connection 3 pole industry type 423/723

Applications

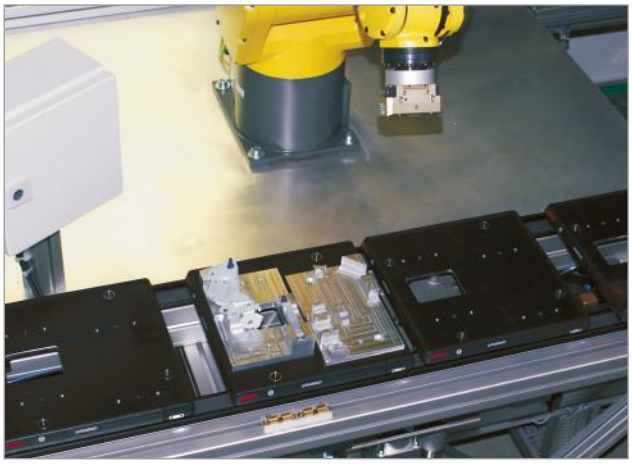
- Supplying mobile sensors and actuators
- Wireless charging of batteries (lithium-ion/lithium-polymer) on mobile systems (option)
- Controlling magnetic valves
- Activation of locking systems on mobile devices

Technical Data

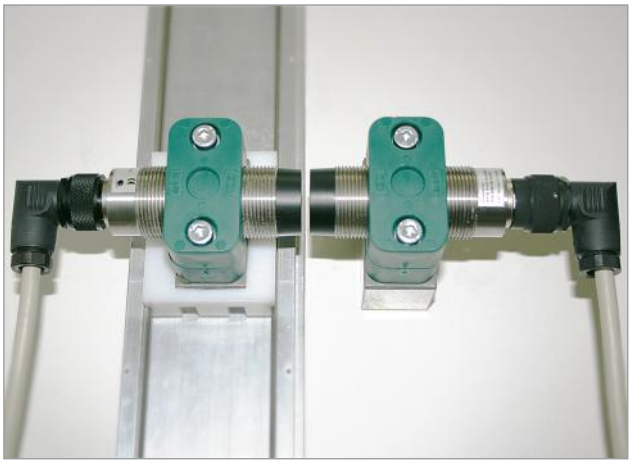
Stationary unit	
length w.o. conn.	50mm
outer thread	M 30 x 1.5
connection	3 pole male plug type 423/723
voltage	24V DC ±10%
current	max. 500mA
Mobile unit	
length w.o. conn.	50mm
outer thread	M 30 x 1.5
connection	3 pole female socket type 423/723
voltage	24V DC ±10%
current	max. 200mA
monitor	LED
response time	max. 1ms
Option with charger	
voltage	one cell (4.2V) two cells (8.4V)
current	approx. 200mA
Mounting	
air gap	0 – 4mm

Duplex Coupler GAMMA

Palett identification system



example: transport system



working arrangement of coupling devices

Functions

Duplex power/data coupling device for self-sufficient transport systems.

Power transmission automatically starts when both inductors are located inside the defined interval. Control and transmission status are indicated by LEDs in mobile and stationary unit.

Integrated electronic components control both power supply and processing of data input/output.

Features

- plug and play
- status LED
- actuator/sensor supply 4.8W/24V
- max. air gap 4mm
- IP Code 67 as standard; IP 68 available on request
- short-circuit-proof
- integrated overvoltage protection
- integrated reverse-polarity protection
- 9 digital outputs p-switching and 8 digital inputs each on both stationary and mobile unit 0V/24V (SPS compatible)
- dead time ≤ 20ms
- plug connection 19-pole industry type 423/723

Applications

- identification of paletts in transport systems
- placement and completion of assembly carrier frames
- detection of cargo on conveyors
- logging of process steps

Technical Data

Dimensions

length w.o. conn.	80 mm (3.2")
outer thread	M 30 x 1.5

Stationary unit

voltage	24V DC ±10%
current	<500 mA
digital outputs	9
digital inputs	8

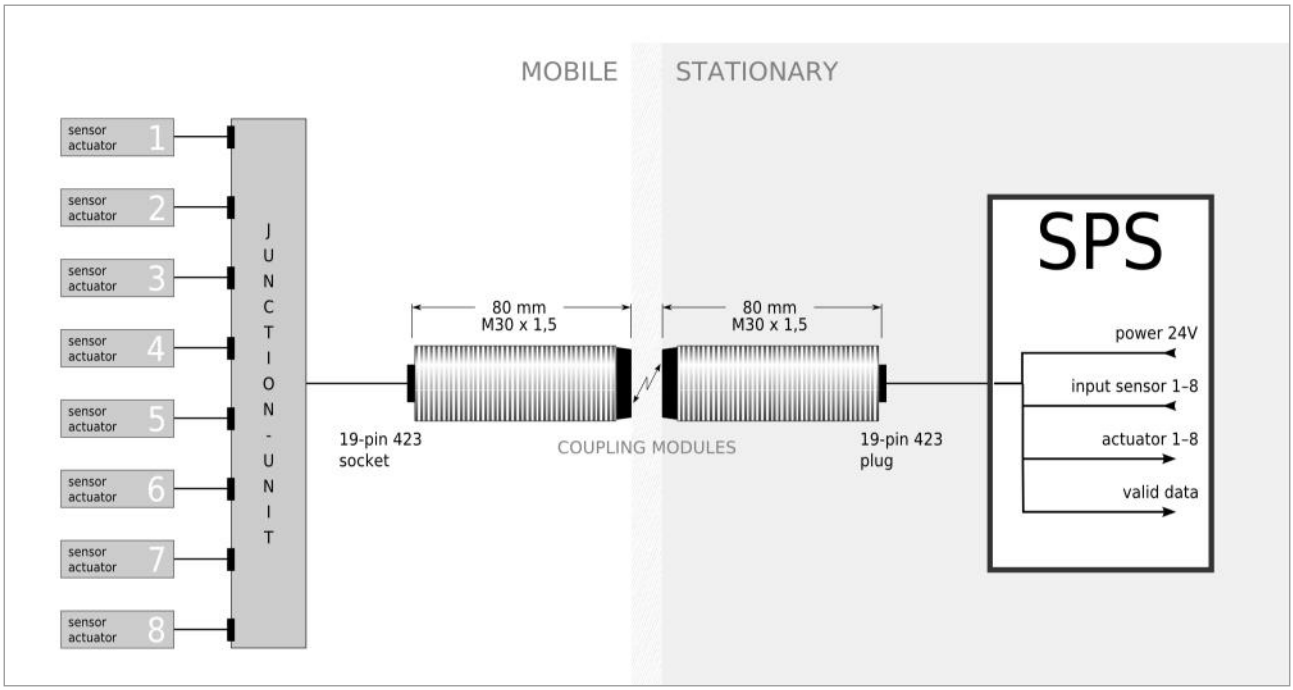
Mobile unit

voltage	24V DC ±10%
current	max. 200 mA
digital outputs	9
digital inputs	8

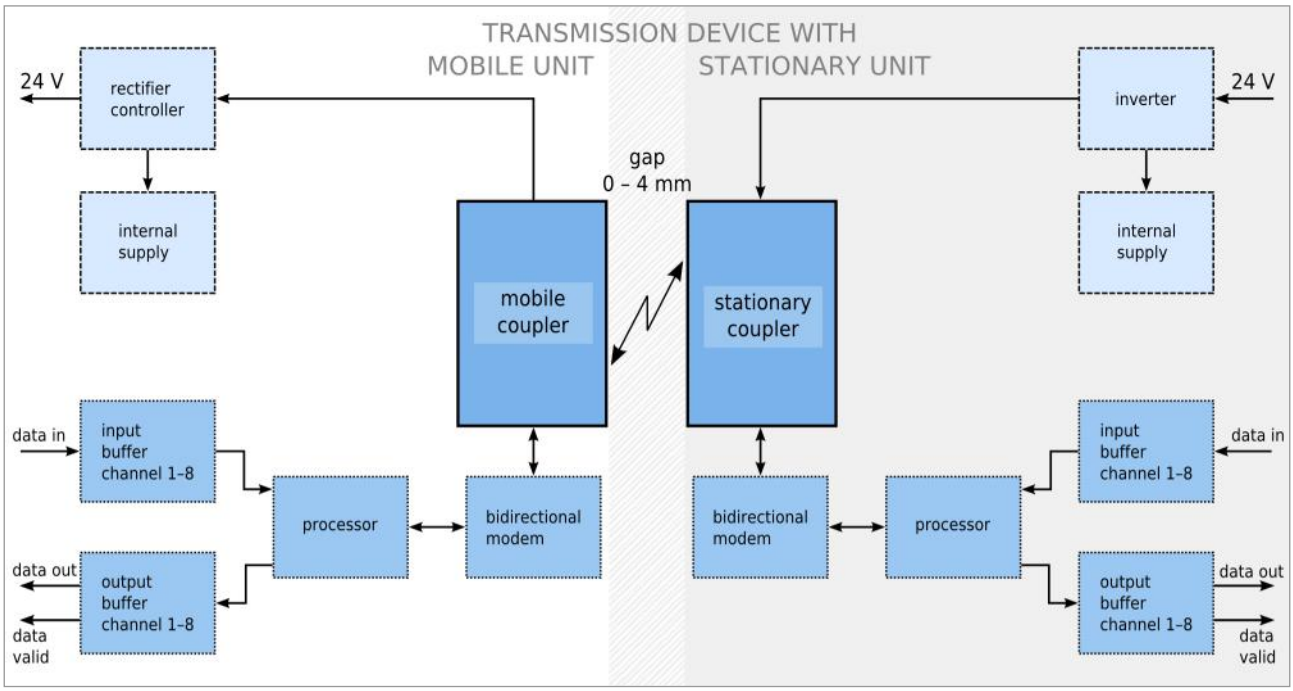
Connection

stationary unit	423 male (19-pole type)
mobile unit	423 female (19-pole type)

Application example



Block diagram



Contact

QSS
QUALITY SYSTEMS SOLUTIONS GMBH
Aemet 5
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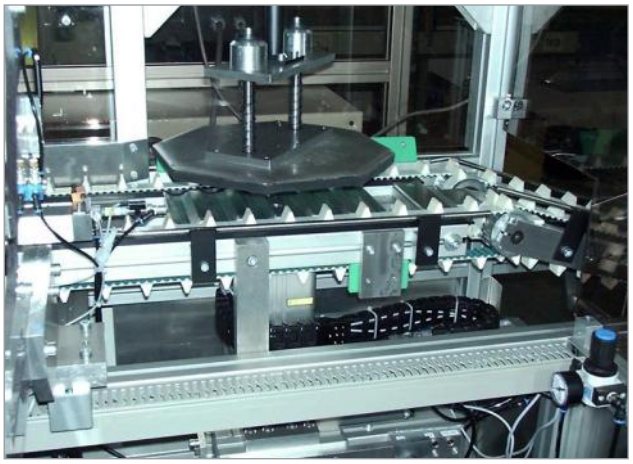
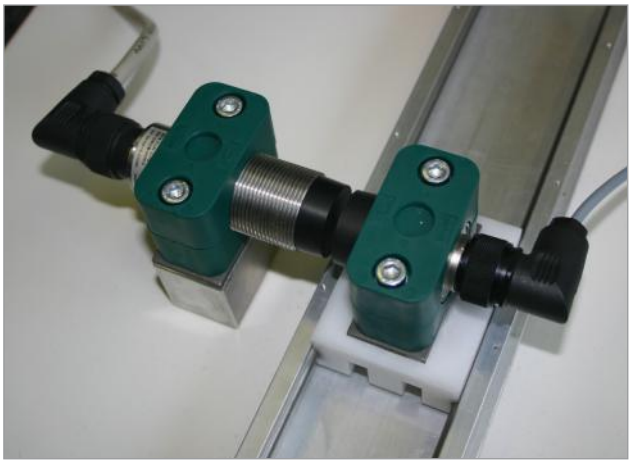
F +4144 2420010
www.qsss-solutions.ch
info@qss-solutions.ch

Analog Coupler BETA

Wireless transmission system for analog data and power



application example: packaging machine



working arrangement of coupling device

Functions

Wireless transmission system for analog data and power.

Power transmission automatically starts when both inductors are located inside the defined position. LEDs in mobile and stationary unit indicate control and transmission status.

Integrated electronic components control both power supply and processing of data input/output.

Features

- „Plug and Play“
- status LED
- mobile sensors supply 4.8 W/24 V
- air gap 0 – 4 mm
- short-circuit-proof
- resolution 12 bit
- integrated surge voltage protection
- integrated reverse-polarity protection
- max 4 analog transmission channels
- dead time approx.1 ms
- IP Code 67 as standard; IP 68 available on request
- plug connection 7-pole industry type 423/723

Technical Data

Stationary unit

length w.o. conn.	80 mm
outer thread	M 30 x 1,5
connector	7-pin male plug type 423/723
voltage supply	24 V DC ±10%
current	max. 500 mA
analog output channels	4/2/1 (optionally)
resolution	12 bit
channel output voltage	0 – 10 V

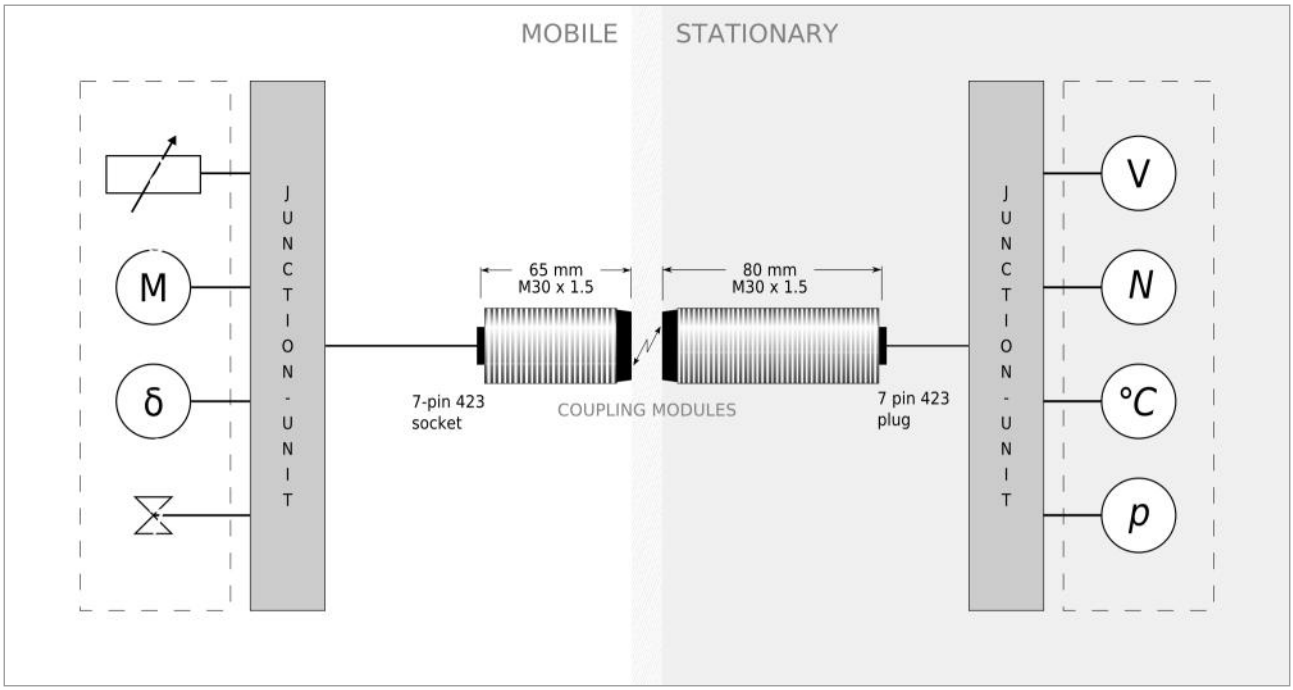
Mobile unit

length w.o. conn.	65 mm
outer thread	M 30 x 1,5
connector	7-pin female socket type 423/723
voltage	24 V DC ±10%
current	max. 200 mA
analog input channels	4/2/1 (optionally)
resolution	12 bit
channel input range	0 – 10 V
monitor	LED
sampling rate	2 ksps (1 channel model) 1 ksps (2 channel model) 0,5 ksps (4 channel model)

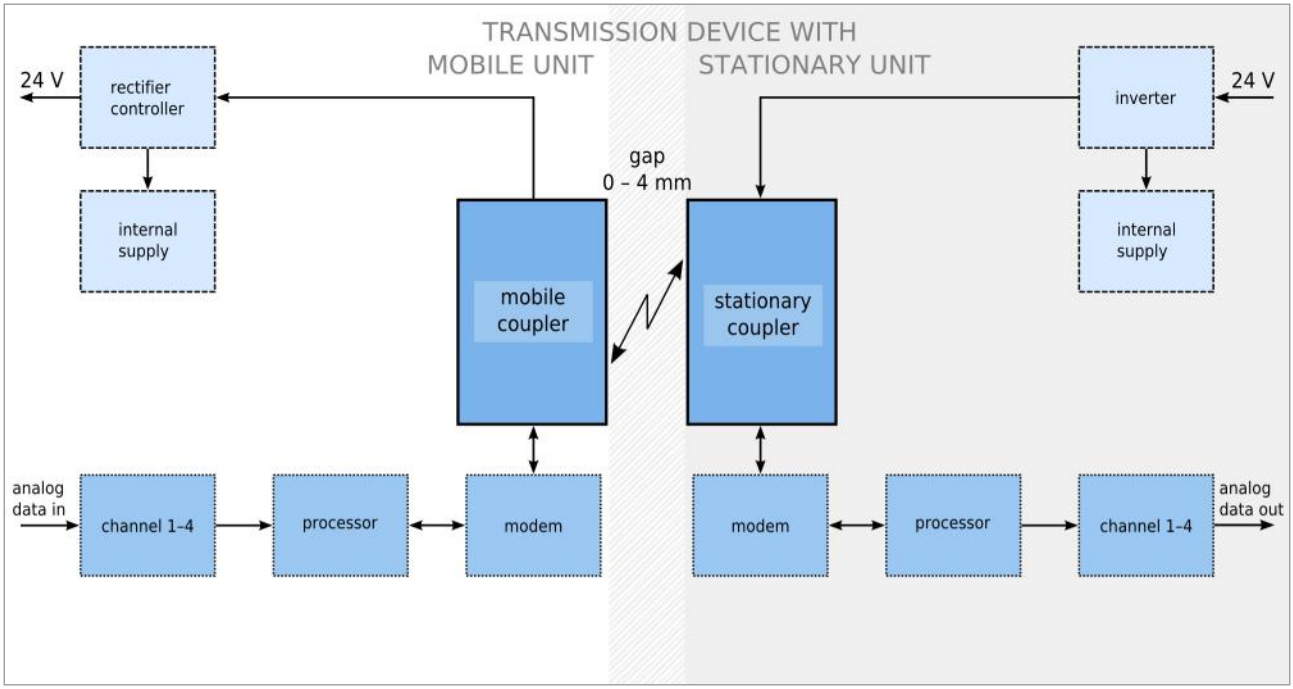
Mounting

air gap	0 – 4 mm

Application example



Block diagram



Models

Description	Order number
Stationary unit 1 channel	VDC-B-S-C1
Stationary unit 2 channel	VDC-B-S-C2
Stationary unit 4 channel	VDC-B-S-C4
Mobile unit 1 channel	VDC-B-M-C1
Mobile unit 2 channel	VDC-B-M-C2
Mobile unit 4 channel	VDC-B-M-C4

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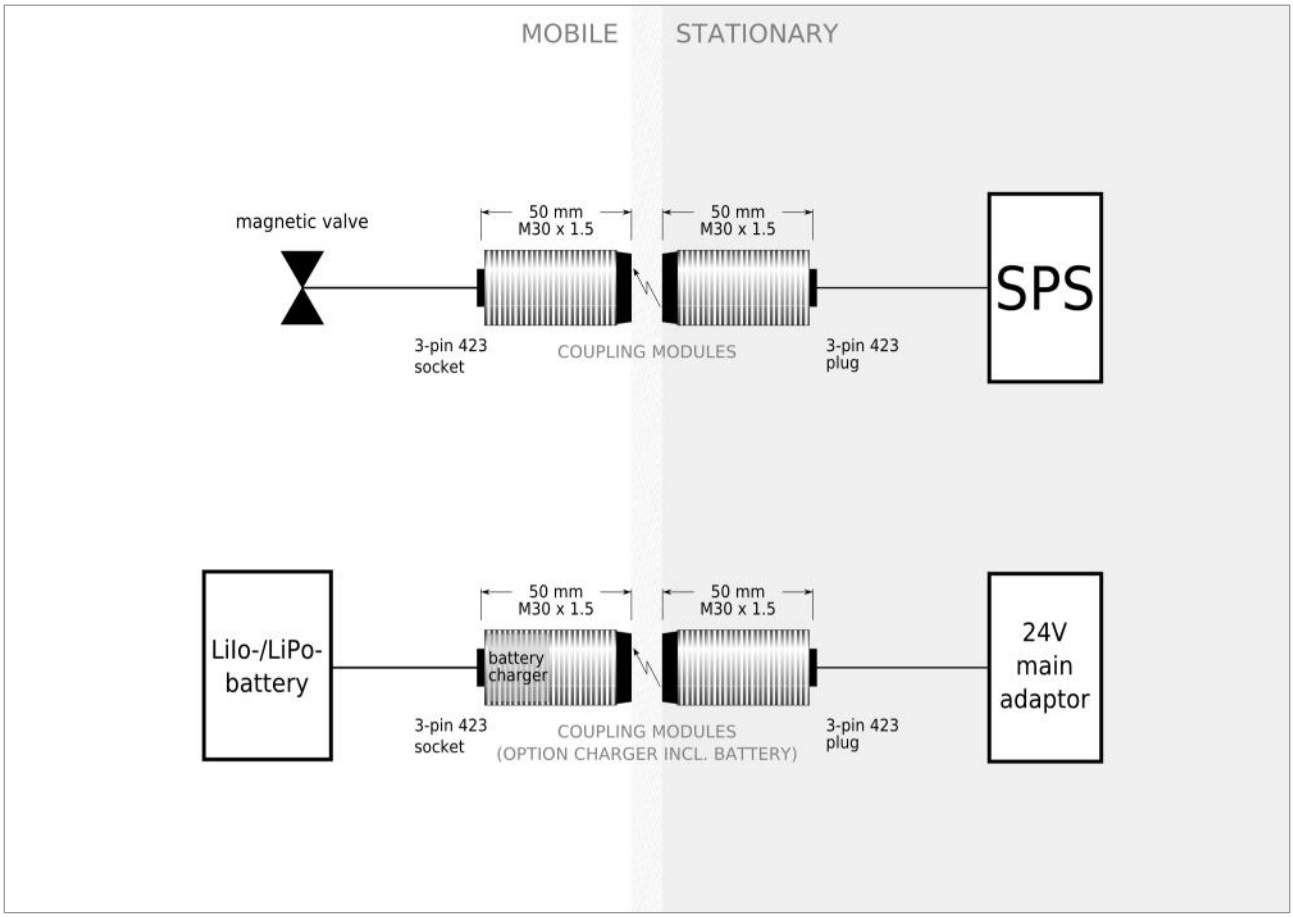
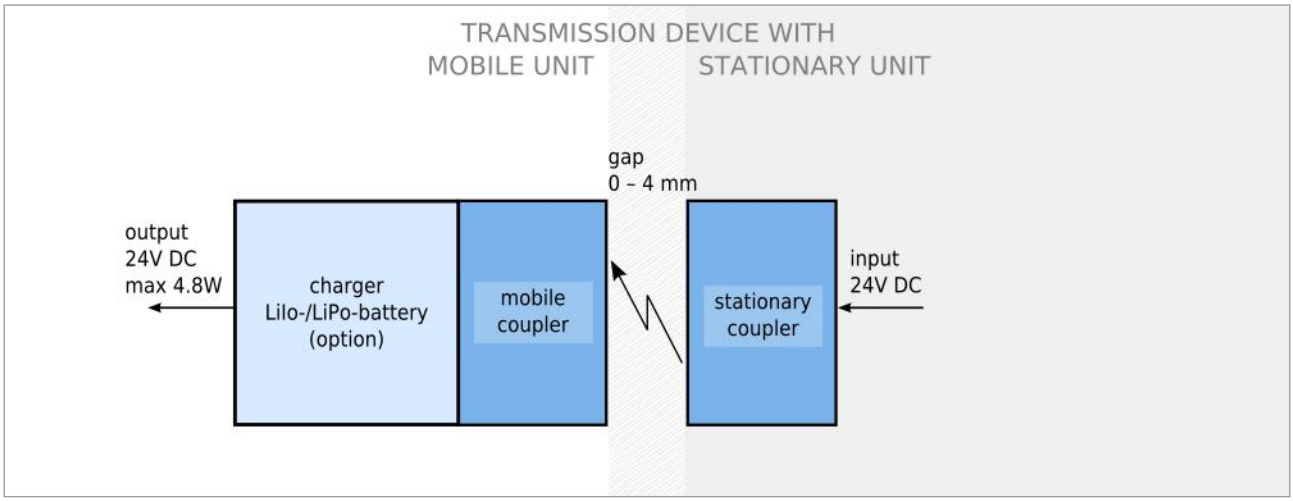
Application example



Block diagram



Models

Description	Order number
Stationary unit 1	K112-A-S
Mobile unit with magnetic valve	K112-A-S
Mobile unit with Lilo-/LiPo battery charger	K112-A-M-C

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QUALITY SYSTEMS SOLUTIONS GMBH
Aemet 5
CH-8344 Bäretswil
T +4144 2420000
F +4144 2420010
www.qsss-solutions.ch
info@qss-solutions.ch