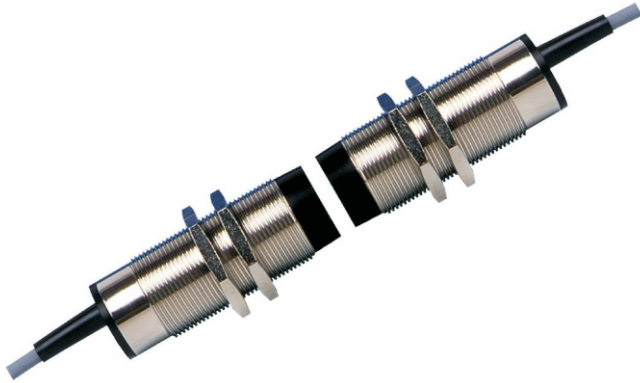


### Overview



Using inductive transmission devices, sensors and actuators on moveable appliances could be easily supplied with electrical energy without any huge effort.

Based on an electromagnetic energy-field, which is transmitted from a primary coil to a secondary coil, a reliable electric power supply can be assured. This dedicated near field transmission offers great advantages also considering harsh industrial environments conditions. Thus, the power transmission will not be deranged, even not by water, dirt, dust or any coolant. The Air gap Power Coupling Unit SPS-PCU allows save transmission in an easy way, particular previous knowledge is not required.

The system consists of two parts: a Transmitter Module (SPS-T) and a Receiver Module (SPS-R). Once, 24V electric power has been supplied the SPS-T, e.g. by an output driver of a PLC, the transmission is activated and supplies 24V to the SPS-R output. Thereupon the connected sensors or actuators gets activated immediately.

Of course a Transmssion module SPS-T is able to power different Receiving modules SPS-R, one after the other. Once a SPS-R is placed in front of a SPS-T, the energy transmission could take place. Air gap Power Coupling units SPS PCU is electrically insulated and completely encapsulated. Having no parts to wear out or service the system needs no maintenance work.

Due to operating in a low frequency range electrical and magnetic emissions (EMI) are not expected.

### Features

- no maintenance required, suitable for 24/7 continuous operation
- different form factors/performance categories
- housing protection class IP67
- not affected by electromagnetic radiation
- suitable for harsh industrial environment (e.g. dust, dirt, humidity, etc.)

### Your benefits

- no maintenance required
- overvoltage / input polarity protection
- LED indicates operating status
- output short circuit proof
- easy to install, compact size M30x1,5
- no moving parts to wear out or service
- connector replacement

### Applications

- Assembly lines
- Punching machines
- Rotary indexing table
- Shipping industry
- Energy to be transmitted through a wall (glas, ceramic, wood, etc.)

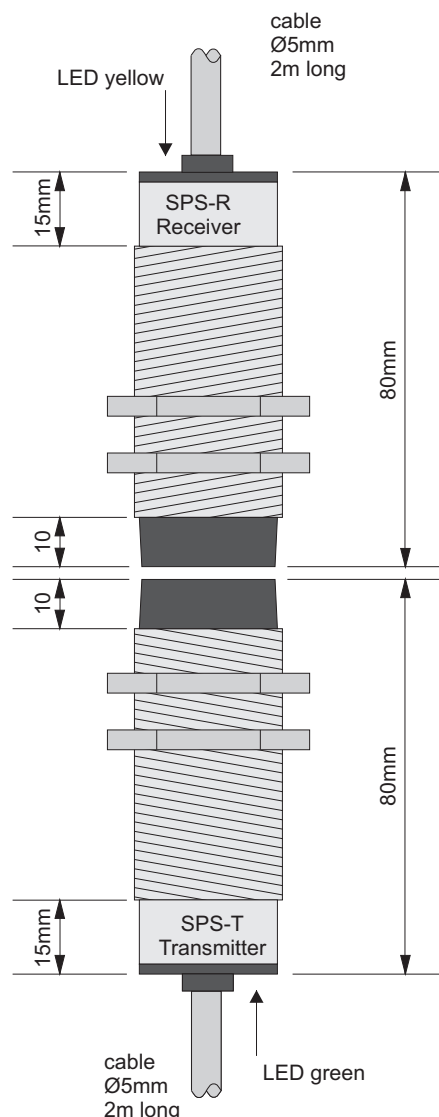
### Technical data

<b>Transmitter</b>	Power supply	24VDC/0,5A max.
	Indication (active)	LED green
	Time to activate	max. 50ms
	Dimensions	M30x80mm
	Connection	brown: +24V, white: - ground 2x0,34mm <sup>2</sup> , 2m, shielded
<b>Receiver</b>	Power supply out	24VDC/0,16A max.
	Indication (active)	LED yellow
	Time to activate	max. 50ms
	Dimensions	M30x80mm
	Connection	brown: +24V, white: - ground 2x0,34mm <sup>2</sup> , 2m, shielded
<b>Mechanics</b>	Material	brass/nickel with Delrin tip
	Mounting	M30x1,5 with 2x M30 threads
	Air gap	max. 2mm
	Lateral offset	max. 3mm (SPS-T to SPS-R)
	Housing protection	IP67
	Weight	530g

### Notes

- Maximum output power is available as soon SPS-T and SPS-R are located in opposite.
- One SPS-T is able to drive more than one SPS-R (one after the other).
- the front Delrin tip should not be surrounded by metallic parts. Embedded installation is therefore not recommended.
- Shield should be applied directly to SPS-T and SPS-R enclosure. If not possibly use shield lead.
- Using SPS-T at 24V without SPS-R in opposite is not recommended, unless SPS-T has good heat transfer capability. The parts could get hot.

### Dimension



### Your contact

MESA Systemtechnik GmbH  
 Turmstrasse 8  
 D-78467 Konstanz • Germany  
 Telefon: ++49-7531/9371-0  
 Fax: ++49-7531/9371-71  
 Email: [info@mesa-systemtechnik.de](mailto:info@mesa-systemtechnik.de)  
[www.mesa-systemtechnik.de](http://www.mesa-systemtechnik.de)

