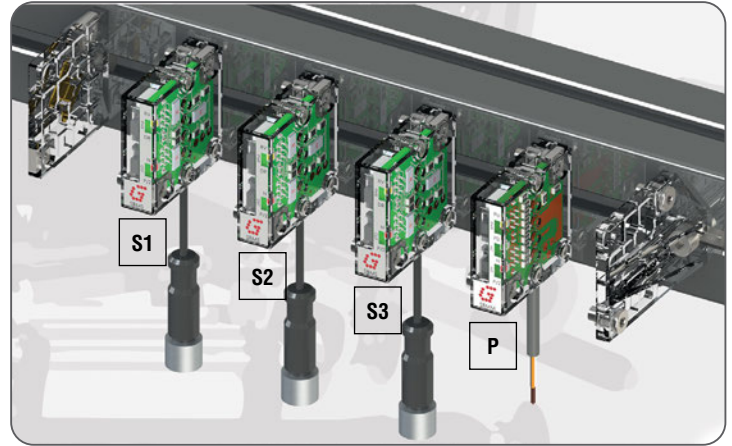# SBMS & SBMM Modular Sensor Box – (NO & NC Simultaneous Outputs)

- Connect M8 3-pin sensors (pnp or npn) in series or individually.
- Connect up to 20 secondary modules to one primary module.
- Secondary units can reverse Normally Open (NO) / Normally Closed (NC) sensor logic.
- Primary module has NO & NC signal LED indicators.
- Primary module can send either pnp or npn outputs back to PLC.
- Easy configuration using switches (see below).
- LED sensor status indicators for easy troubleshooting.
- 12-24 Vdc (+/- 10%) power requirement.
- IP40 rating
- End caps allow direct mounting on standard aluminum profile.
- A modular, very compact, scalable solution.
- All modules (primary, secondary, end cap) are 36mm x 34mm x 10mm.
- See page 985 for: M8 3-pin extension cable, Y-splitter for easy connection to PRO teachable sensors, and field wireable 3-Pin M8 connector for easy connection of sensors with leads.

Modules can mount to end caps in either direction.

Magnetic Sensor

Magnetic Sensor

+24Vdc
GND

digital output
to PLC
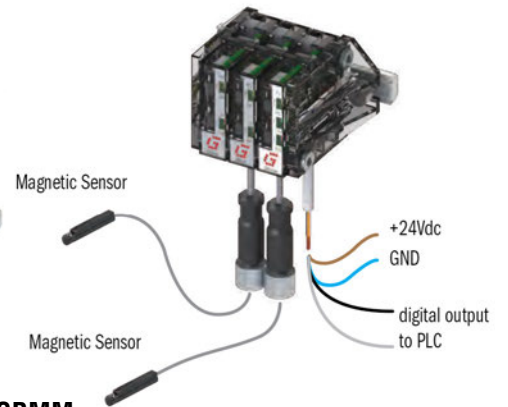
Secondary Module SBMS:

Choose sensor logic:
Select "RV" to set sensor output status to NC
Select "DR" to set sensor output status to NO.

Power indicator supplied by primary module.

Choose sensor type:
Select "N" if connecting NPN sensors.
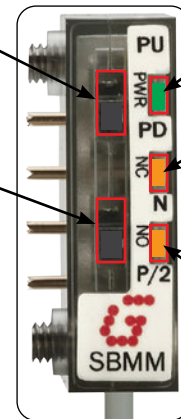Select "P/2" if connecting PNP or 2 wire sensors.
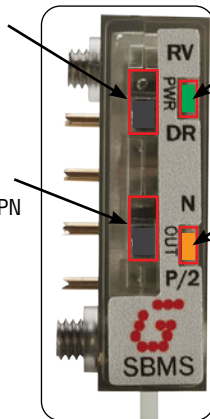
Sensor output indicator:
Sensor logic status (NO or NC) will effect this output.

Primary Module SBMM:

Choose output type:
Select "PU" for NPN output.
Select "PD" for PNP output.

Select "N" for NPN output.
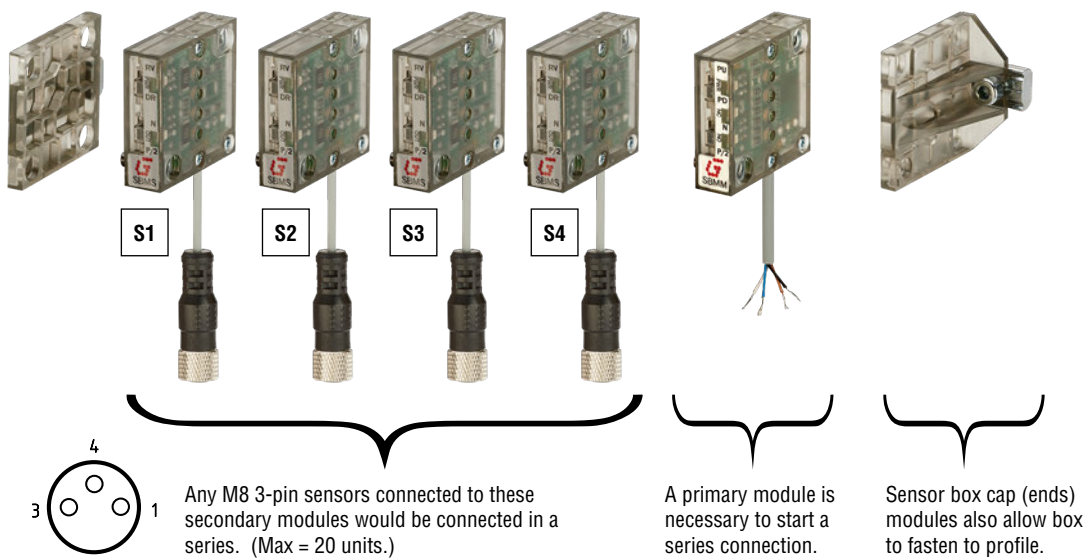Select "P/2" for PNP output.

Power indicator.

Main output indicator showing NC output to PLC. (Depending on sensor logic)

Main output indicator showing NO output to PLC. (Depending on sensor logic)

Quick#	7403	7402
Part#	SBMS	SBMM
Price	$55.00	$77.00
Electrical Connection	1 female M8 3-pin connector, 150mm long	4 wire unterminated cable, 1m long
Weight	50g	50g
Formation	3x0.096mm^2	4x0.14mm^2
Blue wire	GND	
Brown wire	Vcc from 12-24 Vdc (+/- 10%)	
Black wire	Sensor output signal (input for secondary module)	Series of secondary NO (depending on configuration)
White wire	-	Series of secondary NC (depending on configuration)
Dimensions	36mm x 34mm x 10mm	

SBMS & SBMM Modular Sensor Box – (NO & NC Simultaneous Outputs)

Application Example: (single series connection)

| S1 | S2 | S3 | S4 |

Any M8 3-pin sensors connected to these secondary modules would be connected in a series. (Max = 20 units.)

A primary module is necessary to start a series connection.

Sensor box cap (ends) modules also allow box to fasten to profile.

Application Example: (multiple series + parallel connection)

| S1 | S2 | | S3 | S4 | | S5 | |

Output wires for S1 & S2

Output wires for S3 & S4

Output wires for S5

When using multiple primary modules it's only necessary to supply power to the first ↑
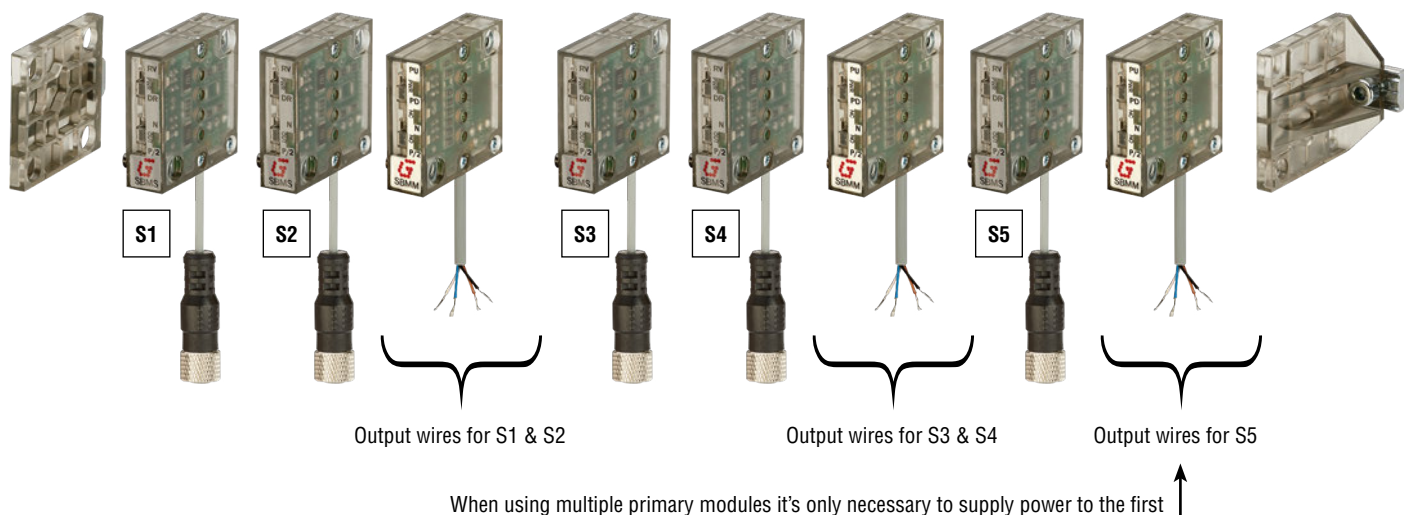
Choose SBMM & SBMS when NO and NC outputs needed to be supplied to PLC SIMULTANEOUSLY

Secondary Module

Quick#	Part#	Price
7403	SBMS	$55.00

- Max. Supply current to sensor: 200mA
- Module current consumption: 30mA

Primary Module

Quick#	Part#	Price
7402	SBMM	$77.00

- Max current of NO output: 1A
- Max current of NC output: 150 mA
- Max supply current: 2A
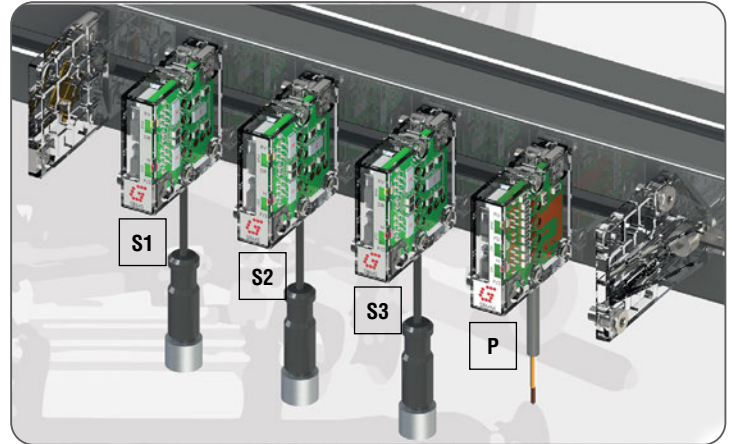- Module current consumption: 30mA

End Caps (both sides included)

Quick#	Part#	Price
7404	SBMK	$10.89

SBMS-E & SBMM-E Modular Sensor Box – (NO & NC Outputs, Not Simultaneous)

- Connect M8 3-pin sensors (pnp or npn) in series or individually.
- Connect up to 20 secondary modules to one primary module.
- Secondary units can reverse Normally Open (NO) / Normally Closed (NC) sensor logic.
- Primary module has one NO signal LED indicators, but can be switched to NC by changing sensor logic.
- Primary module can send either pnp or npn outputs back to PLC.
- Easy configuration using switches (see below).
- LED sensor status indicators for easy troubleshooting.
- 12-24 Vdc (+/- 10%) power requirement.
- IP40 rating
- End caps allow direct mounting on standard aluminum profile.
- A modular, very compact, scalable solution.
- All modules (primary, secondary, end cap) are 36mm x 34mm x 10mm.
- See page 985 for: M8 3-pin extension cable, Y-splitter for easy connection to PRO teachable sensors, and field wireable 3-Pin M8 connector for easy connection of sensors with leads.

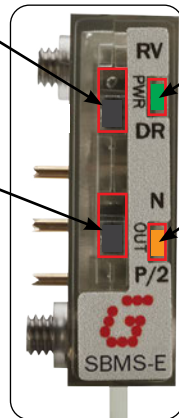Modules can mount to end caps in either direction.

Magnetic Sensor

Magnetic Sensor

+24Vdc
GND

digital output to PLC
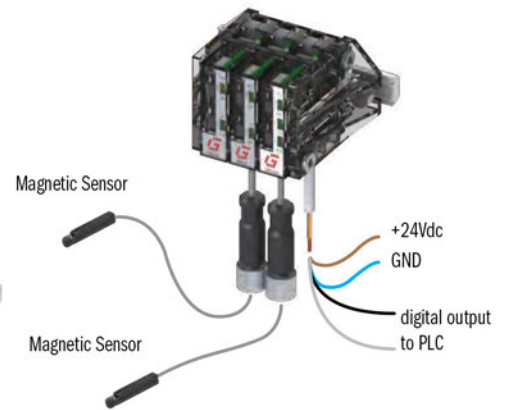
Secondary Module SBMS-E:

Choose sensor logic:
Select "RV" to set sensor output status to NC
Select "DR" to set sensor output status to NO.

Choose sensor type:
Select "N" if connecting NPN sensors.
Select "P/2" if connecting PNP or 2 wire sensors.

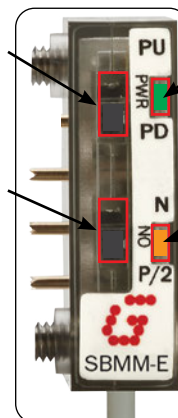Power indicator supplied by primary module.

Sensor output indicator:
Sensor logic status (NO or NC) will effect this output.

Primary Module SBMM-E:

Choose output type:
Select "PU" for NPN output.
Select "PD" for PNP output.

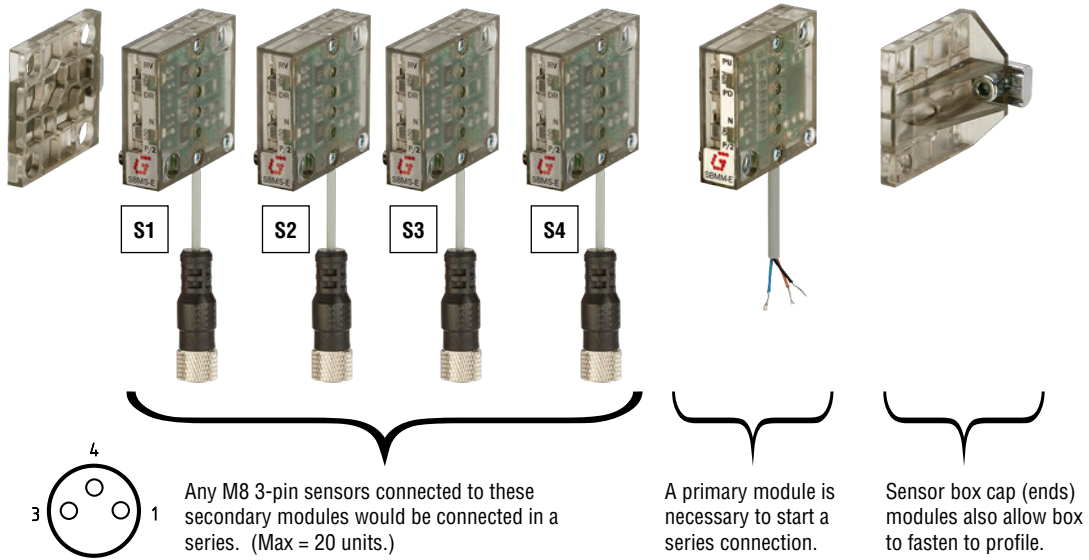Select "N" for NPN output.
Select "P/2" for PNP output.

Power indicator.

Main output indicator showing NO or NC output to PLC. (Depending on sensor logic.)

Quick#	7406	7405
Part#	SBMS-E	SBMM-E
Price	$42.00	$49.00
Electrical Connection	1 female M8 3-pin connector, 150mm long	3 wire unterminated cable, 1m long
Weight	50g	50g
Formation	3x0.096mm^2	3x0.14mm^2
Blue wire	GND	
Brown wire	Vcc from 12-24 Vdc (+/- 10%)	
Black wire	Sensor output signal (input for secondary module)	Series of secondary NO (depending on configuration)
Dimensions	36mm x 34mm x 10mm	

SBMS-E & SBMM-E Modular Sensor Box – (NO & NC Outputs, Not Simultaneous)

Application Example: (single series connection)

S1 S2 S3 S4

4
3 1

Any M8 3-pin sensors connected to these secondary modules would be connected in a series. (Max = 20 units.)

A primary module is necessary to start a series connection.

Sensor box cap (ends) modules also allow box to fasten to profile.

Application Example: (multiple series + parallel connection)

S1 S2 S3 S4 S5

Output wires for S1 & S2

Output wires for S3 & S4

Output wires for S5

When using multiple primary modules it's only necessary to supply power to the first
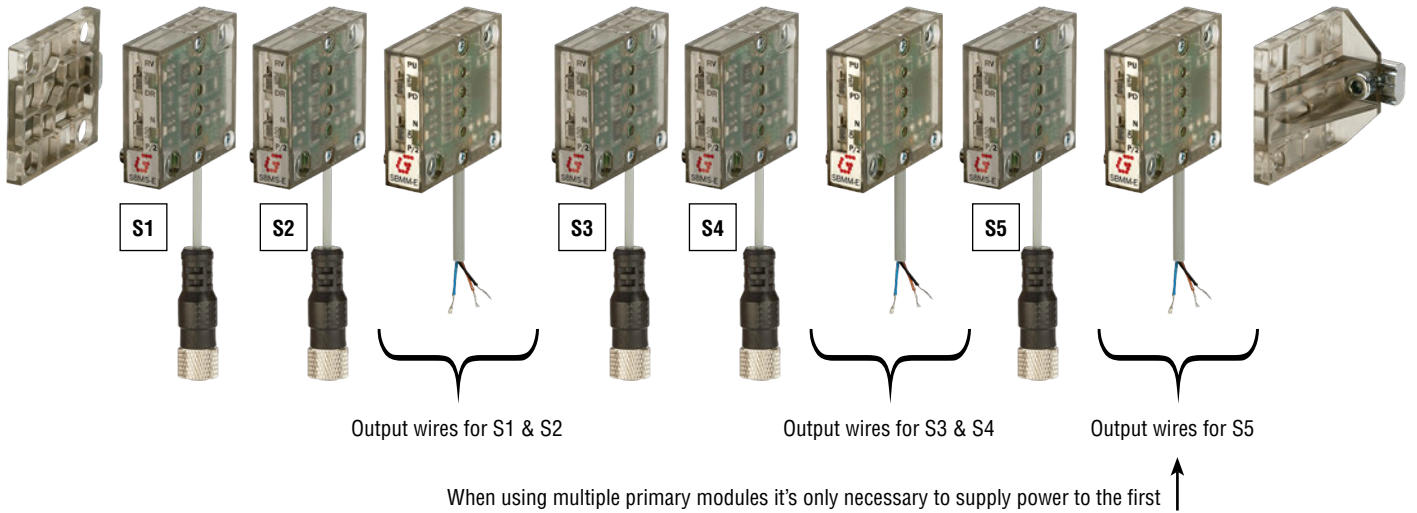
Choose SBMM-E & SBMS-E when either a NO and NC* output is needed to be supplied to PLC. BOTH SIGNALS CANNOT BE SUPPLIED SIMULTANEOUSLY   *NC output is possible by changing sensor logic, see page 996

Secondary Module

Quick#	Part#	Price
7406	SBMS-E	$42.00

- Max. Supply current to sensor: 200mA
- Module current consumption: 30mA

Primary Module

Quick#	Part#	Price
7405	SBMM-E	$49.00

- Max current of NO output: 1A
- Max supply current: 2A
- Module current consumption: 30mA

End Caps (both sides included)

Quick#	Part#	Price
7404	SBMK	$10.89