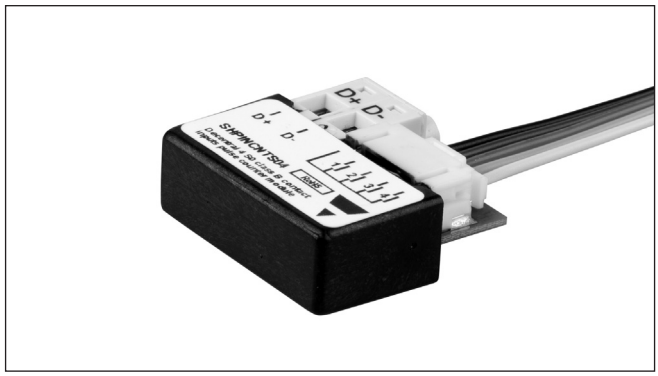
Smart Dupline®
Pulse Counter Module
Type SHPINCNTS04



- **Pulse counter module with 4 S0 class B inputs**
- **Built-in counters for local pulse counting on each input**
- **Count values are stored in non-volatile memory**
- **Counts up to 99999999**
- **Automatic roll-over when max count is reached**
- **Option for counter reset via Smart Dupline**
- **Option for pre-scaler on count inputs**
- **Each input can be configured as counter or std. digital input**
- **Bus-powered**
- **Small dimension housing for decentralized installation inside small junction box**

Product Description

The SHPINCNTS04 is an inputmodule for counting pulses from energy meters, water meters, gas meters etc. The count values are saved in the non-volatile memory of the module and transferred to the SxWEB controller via the Smart Dupline® bus. It is also possible to use the inputs as standard digital inputs, this can be configured via the SxWEB tool for each of the inputs. The compact size of the module makes it possible to fit it in a small junction box or other places with limited space available. There is no need for a local power supply since the module is bus-powered.

Ordering Key

SHPINCNTS04

- **Smart Dupline®**
- **Decentral**
- **Input module**
- **Counter module**
- **Number and type of inputs**

Type Selection

Input number	Type	Supplied by Dupline®
4	S0 class B input, counter	**SHPINCNTS04**

Input Specifications

Inputs	4 S0 Class B
Input current	2.5 mA
Input voltage drop	< 1 V
Cable length	< 3 m
Cable resistance	< 400 Ohms
Input count frequency	< 100 Hz
Dielectric voltage	
Inputs - Dupline®	None

Supply Specifications

Power supply	Supplied by Dupline®

Dupline® Specifications

Voltage	8.2 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	2 mA

General Specifications

Address assignments / channel programming	The address assignment is automatic: the SxWEB controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SxWEB tool
Environment	
Operating temperature	0° to +50°C (+32° to +122°F)
Storage temperature	-50° to +70°C (-4° to 158°F)
Humidity (non-condensing)	20 to 90%
Housing	
Dimensions (h x w x d)	28 x 28 x 10 mm
Material	Noryl GFN 1, Black
Connection	
Max size of wire in Dupline® terminals	1.5 mm^2
CE Marking	Yes
EMC	
Immunity	EN 61000-6-2
- Electrostatic discharge	EN 61000-4-2
- Radiated radiofrequency	EN 61000-4-3

General Specifications (cont.)

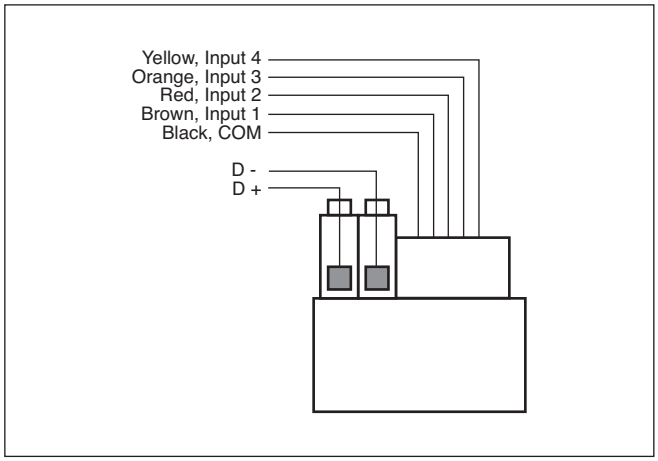
- Burst immunity	EN 61000-4-4
- Surge	EN 61000-4-5
- Conducted radio frequency	EN 61000-4-6
- Power frequency magnetic fields	EN 61000-4-8
- Voltage dips, variations, interruptions	EN 61000-4-11
Emission	EN 61000-6-3
- Conducted and radiated emissions	CISPR 22 (EN55022), cl. B
- Conducted emissions	CISPR 16-2-1 (EN55016-2-1)
- Radiated emissions	CISPR 16-2-3 (EN55016-2-3)

Mode of Operation

The SHPINCNTS04 is fully programmable via the SxWEB tool: each of the 4 inputs can either be configured as pulse count input or standard digital input. Each input has its own counting value that is stored into the flash memory of the module. This value is read by the Sx2WEB controller and can then be used as defined in the SxWEB tool..

Coding / Addressing
No addressing is needed since the module is provided with a specific identification number (SIN): the user has only to insert the SIN number in the SxWEB configuration tool when creating the system configuration.

Wiring Diagrams



Connections

Function	Terminal/Cable colour
Bus	D +
D -	
COM	Black
Input 1	Brown
Input 2	Red
Input 3	Orange
Input 4	Yellow