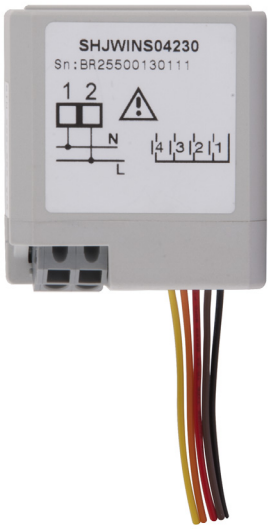
SHJWINS04

Wireless input and pulse counter module



Benefits

- **Fast and easy installation.** In junction/wall box.
- **Easy to use**. Four programmable inputs - normally closed, normally open, pulse counter.
- **Fully intelligent device**. Counted values are stored in a non-volatile memory.
- **Precise measurement**. The pulse counter inputs are S0 class B.
- **High working distance**. The line of sight is 700 m, indoors 10 to 100 m. The range can be extended three times.
- **Scalability.** New modules can be progressively integrated into the system according to the application needs.

Description

The SHJWINS04 is an input module for counting pulses from energy meters, water meters, gas meters etc, and also includes a people-counting function.
The count values are saved in the non-volatile memory of the module and transferred to the Sx2WEB controller wirelessly.
It is also possible to use the inputs as standard digital inputs. This can be configured via the Sx2WEB 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 where limited space is available.
This module is part of the smart Dupline® concept for building automation applications.

Applications

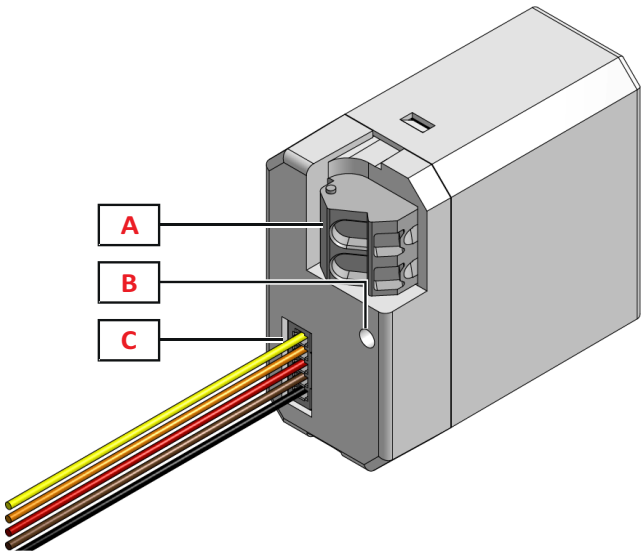
Home and building automation.

Main features

- Wireless transmission based on IEEE 802.15.4, at 2.4GHz.
- Four programmable inputs
- Counts up to 99999999
- Automatic roll-over when max count is reached
- Option for counter reset

- Option for pre-scaler on count inputs

Structure

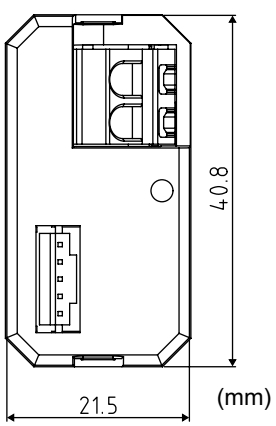


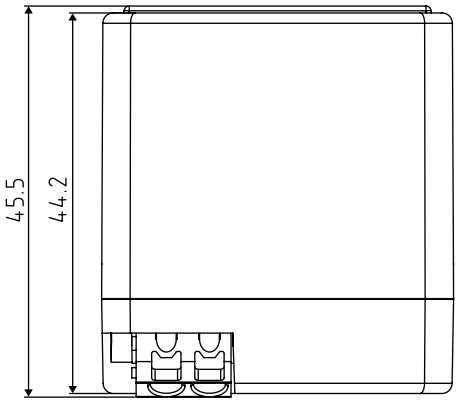
Element	Component	Function
A	Power supply	Power supply terminal (N, L)
B	Information LED	Indicating the following status: Green LED: Power supply Blue LED: WiDup status
C	Inputs	Black: common Brown: input 1 Red: input 2 Orange: input 3 Yellow: input 4

Features

General

Material	Latamid 66
Dimensions (L x W x H)	40.8 x 45.5 x 21.5 mm
Weight	80 g
Protection grade	IP 20
Pollution degree	2





Environmental

Operating temperature	-20° to +50°C (-4° to 122°F)
Storage temperature	-20° to +70°C (-4° to +158°F)
Humidity (non-condensing)	20 to 90% RH

Compatibility and conformity

Electromagnetic compatibility (EMC) - immunity	EN 61000-6-2
Electromagnetic compatibility (EMC) - emissions	EN 61000-6-3
Approvals	CE R&TTE

Power Supply

Power supply	Overvoltage cat. II (IEC 60664-1, par. 4.3.3.2)
Rated operational voltage **SH...230** **SH...115**	 220...240 VAC ±10% 110...120 VAC ±10%
Rated impulse voltage	2.5 kV (1.2/50 µs)
Rated operational power	3 VA
Power on delay	Typ. 2 s

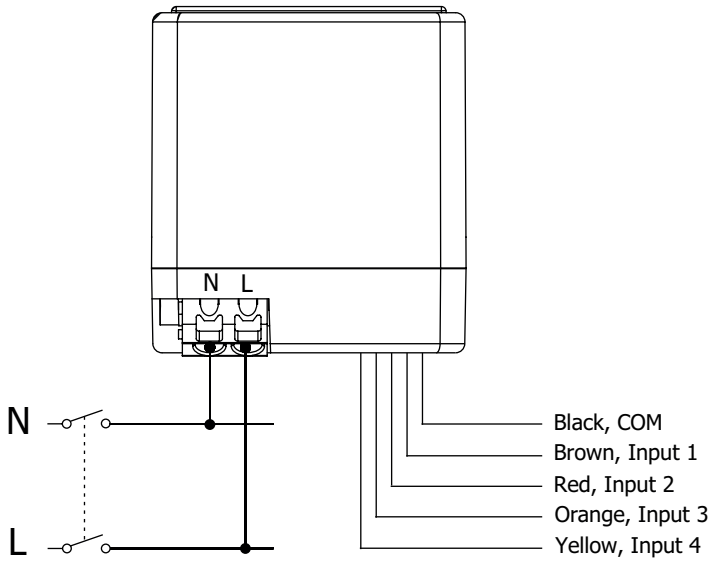
WiDup specification

Bus	Wireless Dupline
Frequency	IEEE 802.15.4, @ 2.4 Ghz for Europe, America and China
Diagnostics	1. Field strength 2. Network activites 3. Devices' presence
Network topology	Star with max three wireless repeaters
Antenna	Internal
Transmission power	According to IEEE 802.15.4
Sensitivity	According to IEEE 802.15.4
Number of slave nodes	Up to 250
Transmission range	<700 m in the open air
Addressing	The address assignment is automatic: the controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the Sx tool.

Input specifications

Inputs	4 S0 Class B (EN62053-31)
Input current	Min. 2mA - max. 10 mA
Input voltage drop	< 1 V
Cable length	< 3 m
Cable resistance	< 400 Ohms
Input count frequency	< 100 Hz

Connection Diagrams



References

Further reading

Information	Document	Where to find it
Sx2WEB installation guide	System manual	www.productselection.net/MANUALS/UK/system_manual.pdf
Sx2WEB software manual	Sx tool manual	www.productselection.net/MANUALS/UK/sx_tool_manual.pdf
Sx2WEB wireless installation manual	Wireless manual	http://www.productselection.net/MANUALS/UK/wireless_manual.pdf

Order code

SHJWINS04115

Ordering key for power supply 115 V

SHJWINS04230

Ordering key for power supply 230 V

CARLO GAVAZZI compatible components

Purpose	Component name/code	Notes
Controller	Sx2WEB24	
Bus generator	SH2WBU230N	