



Introduction

The Langham Industrial Controls LPS012 pulse splitter is designed to split the pulse signal from a water utility meter to two data loggers. The device is passive, has no moving parts or batteries and can be used with any meter with a pulse output (Volt-free contact, reed switch or open collector).

Installation Procedure – Pulse Splitter

- **Step 1:** Wire the pulse output from the meter to the cable marked INPUT. Please observe polarity.
- **Step 2:** Wire the 1st data logger to any cable marked OUTPUT. Please observe polarity.
- **Step 3:** Wire the 2nd data logger to any cable marked OUTPUT. Please observe polarity.
- **Step 4 (LPS13 only):** Wire the 3rd data logger to the remaining cable marked OUTPUT. Please observe polarity.



Safety Warnings

- No user serviceable parts.
- Observe the instructions and all warnings on the device and within these instructions.
- The installer/end-user is fully responsible for the unit's safe installation.
- Local working practices should be adhered to for installation.

Electrical Specification

Please see sheet 2.

Disposal

The device must be disposed of as unsorted waste and must be collected separately to ensure correct environmentally sound disposal. Where possible the device should be returned to the manufacturer (or their authorised agent) for correct disposal. If this is not possible your local Waste Disposal Authority should be consulted to ensure disposal in compliance with waste electrical and electronic equipment (WEEE) regulations that may be in force at the time.

Support

For technical support and queries, please contact:

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Switching Diode

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Electrical Characteristics

Please Note : Wire colours have now changed from Red and Black (Older units) to (current production) Brown and White

The Input, (Red or Brown) wire is connected to the CATHODES of both diodes.
The (Black or White) wires are common and connected together internally.
Each output, (Red or Brown) wire is connected to the ANODE of each of the diodes.

Incorrect polarity can affect the working of the either or both of the outputs.

Maximum Ratings

<u>Type Number</u>	<u>Symbol</u>		<u>Units</u>
Repetitive Peak Reverse Voltage	VRRM	100	V
Reverse Voltage	VR	75	V
Peak Forward Surge Current tp=1us	IFSM	2	A
Repetitive Peak Forward Current	IFRM	500	mA
Forward Current	IF	300	mA
Average Forward Current VR=0	IFAV	150	mA
Power Dissipation l=4mm TL=45°C l=4mm TL≤25°C	PV	440	mW
	PV	500	mW
Junction Ambient l=4mm, TL=constant	ReJA	300	K/W
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 200	°C

<u>Type Number</u>	<u>Symbol</u>	<u>Min</u>	<u>Max</u>	<u>Units</u>
Forward Voltage @IF=10mA	VF	-	1.0	V
Peak Reverse Current VR=75V VR=20V, TJ=150°C VR=20V	IR	-	5	uA
			50	uA
			25	uA
Breakdown Voltage IR=100uA, tp/T=0.01, tp=0.3ms	V(BR)	100	-	V
Capacitance VR=0, f=1.0MHz, VHF=50mV	Cj	-	4.0	pF
Rectification Efficiency VHF=2V, f=100MHz	Tlr	45	-	%
Reverse Recovery Time IF=IR=10mA, IR=1mA IF=10mA, VR=6V, IR=0.1xIR, RL=100Ω	t _{rr}	-	8.0	nS
	t _{rr}	-	4.0	nS