

# Introducing the SOLO IR/LED

## Smart ready 'push' display

The Solo (IR/LED) is a smart ready in-home energy display that provides real-time information and a constant report on a consumer's progress against their predefined targets. With a full colour backlit display it will catch the attention of consumers and make their energy visible.

It connects to pre-smart electric meters using either an IR or LED pulse reader which are easily fitted directly to the front of the meter by the home owner.

The option of IR or LED pulse reader offers considerable flexibility and the Solo now communicates with over nine different meter manufacturers (and we are keen to increase this!)

The Solo stores several years' worth of energy data which can be uploaded to MyEnergy, an intuitive graphical web portal that provides energy tracking and management functions - making it easy for users to take control of their energy consumption.

The Solo also alerts you if it detects unusual energy consumption patterns, helping keep you in charge of your energy consumption.

### Display views

The Speedometer and Fuel Gauge show how much electricity is being used in the home right now and against a target allowance.

The Milometer tracks how much electricity has been used and can be viewed as consumption figures from yesterday and the last seven days.

These analogies to day-to-day life help users quickly grasp the difference between kW and kWh and help to build consumer confidence in understanding energy.

### Sensors

IR or LED pulse reader



- Intuitive, colour back-lit display giving high visibility
- Highly visible Tick and Cross alerts provide an important 'nag factor'!
- Displays currency, kWh or kilos of CO<sub>2</sub>
- Roaming mode allows early 'exploration'
- Comparison of weekly data
- Uses a SD card to store data
- Smart meter ready

## Solo Specifications

### Display

Dimensions:	approx 145 x 75 x 35mm
Materials:	UL approved ABS
Window:	perspex or similar with protective coating, 2 colour printing
Ingress Protection:	IP20
Ambient temperature:	0°C to +45°C operating, 75% RH non-condensing
Power consumption:	< 0.75W active, 0.5W with backlight off
Power supply:	mains PSU, 230Vac nominal 50Hz for UK wall socket
DC socket:	barrel-type
Radio:	2.4GHz ZigBee, Manufacturer Specific profile
Display:	colour transfective backlit TN LCD, approx. 55 x 90mm active area, chip on glass
UI:	3 momentary buttons, LED for display functions see the Solo user manual

### Transmitter

Dimensions:	approx 150 x 70 x 45mm
Materials:	UL approved ABS
Ingress Protection:	IP52
Ambient temperature:	-20°C to +45°C operating, 75% RH non-condensing
Battery life:	>2 years typical, 8mths minimum for a continuously changing load
Battery type:	3 AA-cell, Alkaline
Sensor-In socket:	barrel-type
Radio:	2.4GHz ZigBee, Manufacturer Specific profile
UI:	single momentary button for pairing with LED feedback
Measurement interval:	2 seconds
Transmission interval:	2 second minimum, triggered by a load change of > 25W

### Performance

Range:	30m, 2 stud walls
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### CT Current Sensor

Type:	split-core ferrite current clamp
Max current:	75 Amp AC 50Hz, Cat III
Construction:	3000 turns, integral ballast resistor
Connection:	1.0m cable, barrel connector

### Approvals

•EN300 328	•EN55024
•EN 301 489	•EN60335-1
•EN61000-3-2	•CE
•EN61000-3-3	•RoHS
	•WEEE

Manufacturing life:	2 yrs, i.e. components shall not have an end-of-life within 2 yrs of manufacture start
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Pack includes:	display, transmitter, stand, clamp sensor, batteries, PSU, instructions, packaging
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Warranty:	12 months
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Other Solo's available from GEO:

#### Electricity monitors

- Smart Solo (communicates with Smart Meters)
- Solo with IR or LED reader
- Solo microgeneration (for us with solar PV panels)

