ZigSense™

ZS3G-SMS Cellular I/O node

- **Pumps**
- **Motors**
- **Generators**
- **Refrigerators**
- **Freezers**
- **Fans**
- **Lighting**
- **HVAC systems**
- **Data centre alarms**
- **PLC I/O**

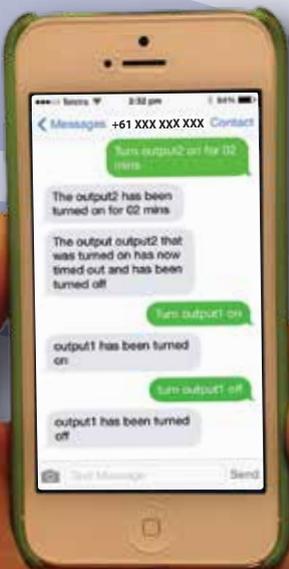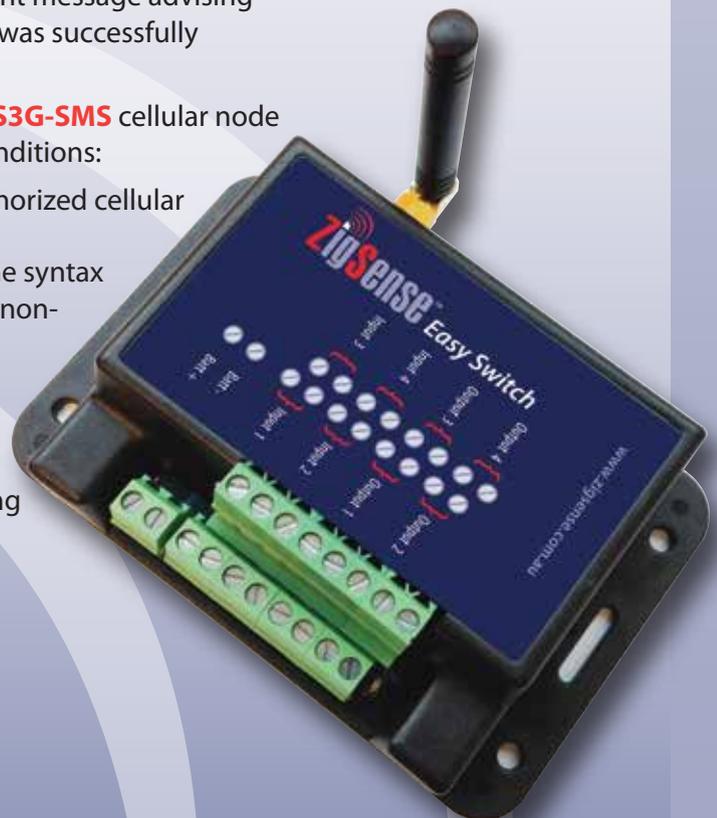**Irrigation systems** •
PIVOT alarms •
Poultry house alarms •
Glasshouse alarms •
Cold storage alarms •
Gas alarms •
Garage doors control •
Domestic alarms •

ZigSense model **ZS3G-SMS** is an out of the box ready for use monitor and control node utilizing standard GSM/3G cellular networks as its communications infrastructure to exchange SMS messages.

By sending SMS commands to the **ZS3G-SMS** cellular node, authorized users can remotely monitor and control up-to four digital inputs and four digital outputs wired to a wide range of industrial equipment, remote Irrigation systems, motors, pumps, generators, fans, lighting systems, PLCs and much more.

Using a standard mobile or smart phones, authorized users enter commands selected from a list of pre-programmed SMS messages. These monitor and control commands are sent to pre-defined cellular phone numbers by the user.

For every command sent by the user, the **ZS3G-SMS** cellular node returns SMS acknowledgement message advising the sender whether the command was successfully accomplished.

To maintain safety & security the **ZS3G-SMS** cellular node constantly checks the following conditions:

A. Was the message sent by an authorized cellular phone number.
B. Does the SMS message match the syntax programmed in the cellular node's non-volatile memory.

Erroneous SMS message syntax or commands sent by unauthorized users will be rejected. Rejection messages will be sent to the sending person and the administrator.

ZS3G-SMS-2 Pulse Counter

ZS3G-SMS-2 Pulse Counter will count pulses generated by flow meters, water meters, gas meters or any device that generates pulse frequency of up to 100Hz.

The pulse counter supports 2 x Digital Inputs and 2 x Digital Outputs 'dry' relay contacts. One of the digital inputs can be set to a pulse counter.

ZS3G-SMS-2 Pulse Counter generates two variables:

1. Pulse Counter
2. Total calibrated pulses = Litres

The user can enable / disable the counter input by programming the 2nd Digital Input to Start / Stop counting.

The device can be programmed to send SMS messages and report when a set point has been reached.

The counter can either be Reset automatically or the operator may choose to send a manual Reset counter command.

After clearing its settings, the SMS IO controller can return to its standard SMS settings.

ZS3G-SMS-2 Tank Level

ZS3G-SMS-2 Tank Level is designed to monitor liquid or grain level in tanks and silos using a pressure sensor or any Analog signal in the range of 0 – 5VDC.

The tank level controller supports 2 x Inputs where one Analog input monitors the tank level and the other monitors digital conditions. The device also supports 2 x Digital Output 'dry' relay outputs.

The **ZS3G-SMS-2 Tank Level** sends an SMS message reporting the level based on time or on a pre defined set point.

After clearing its settings, the SMS IO controller can return to its standard SMS digital IO controller mode.

ZS3G-SMS Cellular I/O node

Cellular network: 2G/3G quad frequency

SIM Card: Standard size cellular SIM

Number of Digital IOs

ZS3G-SMS-2: 2xDigital Inputs + 2xDigital Relay Outputs

ZS3G-SMS-4: 4xDigital Inputs + 4xDigital Outputs

ZS3G-SMS-8: 8xDigital Inputs + 4xDigital Outputs

ZS3G-SMS-2 Pulse Counter: 1xPulse Counter + 1xDigital Input + 2xDigital Relay Outputs

ZS3G-SMS-2 Tank Level: 1xTank Level + 1xDigital Input + 2xDigital Relay Outputs

Input Voltage: +24V Max

Relay contact: Resistive 125VAC 3A max (SMS-2, SMS-4)

Relay contact: Resistive 24VAC 0.5A max (SMS-8)

Programming & setup: SMS messages only
No need for software

Data retention: 10 years

Power supply: +12 to +30VDC, 1A (not supplied)

SMS commands (short list)

- *Define administrator*
- *Add, Remove Users*
- *Name Inputs*
- *Name Outputs*
- *Program Inputs: Latch, Unlatch*
- *Program Inputs: Normally Open/ Normally Close*
- *Inputs to Outputs Link*
- *Force Output ON*
- *Force Output OFF*
- *Monitor supply voltage*
- *Monitor 'Heart Beat'*
- *Alarm Low supply voltage*
- *Point-to-Point commands (SMS-2)*
- *Factory Reset*

ZigSense ← **ZigCloud**