

ZS3G-SMS Cellular I/O node

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

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.

Irrigation systems •

PIVOT alarms •

Poultry house alarms •

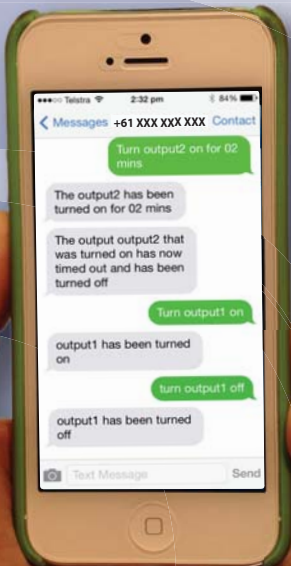
Glasshouse alarms •

Cold storage alarms •

Gas alarms •

Garage doors control •

Domestic alarms •



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-Temp-2 Temperature Monitoring



ZS3G-SMS-TEMP-2 I/O controller is designed to monitor Temperature in commercial Refrigerators and Freezers. The Temperature sensor is a 10K NTC Thermistor supplied with 5m cable.

The controller will monitor temperatures between -25°C and $+50^{\circ}\text{C}$.

The **ZS3G-SMS-Temp-2 controller** supports 2 x Inputs: An Analog input is used for Temperature monitoring and the second input monitors digital or alarm conditions. The two 'dry' relay outputs support 2A max.

The **ZS3G SMS-Temp-2 controller** will respond to user's text message requests for current Temperature readings, digital conditions and more. It will measure and generate Temperature High or Low alarm messages in SMS text format to be sent to multiple authorized users.

ZS3G-SMS-T2 Tank Level Monitoring

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.

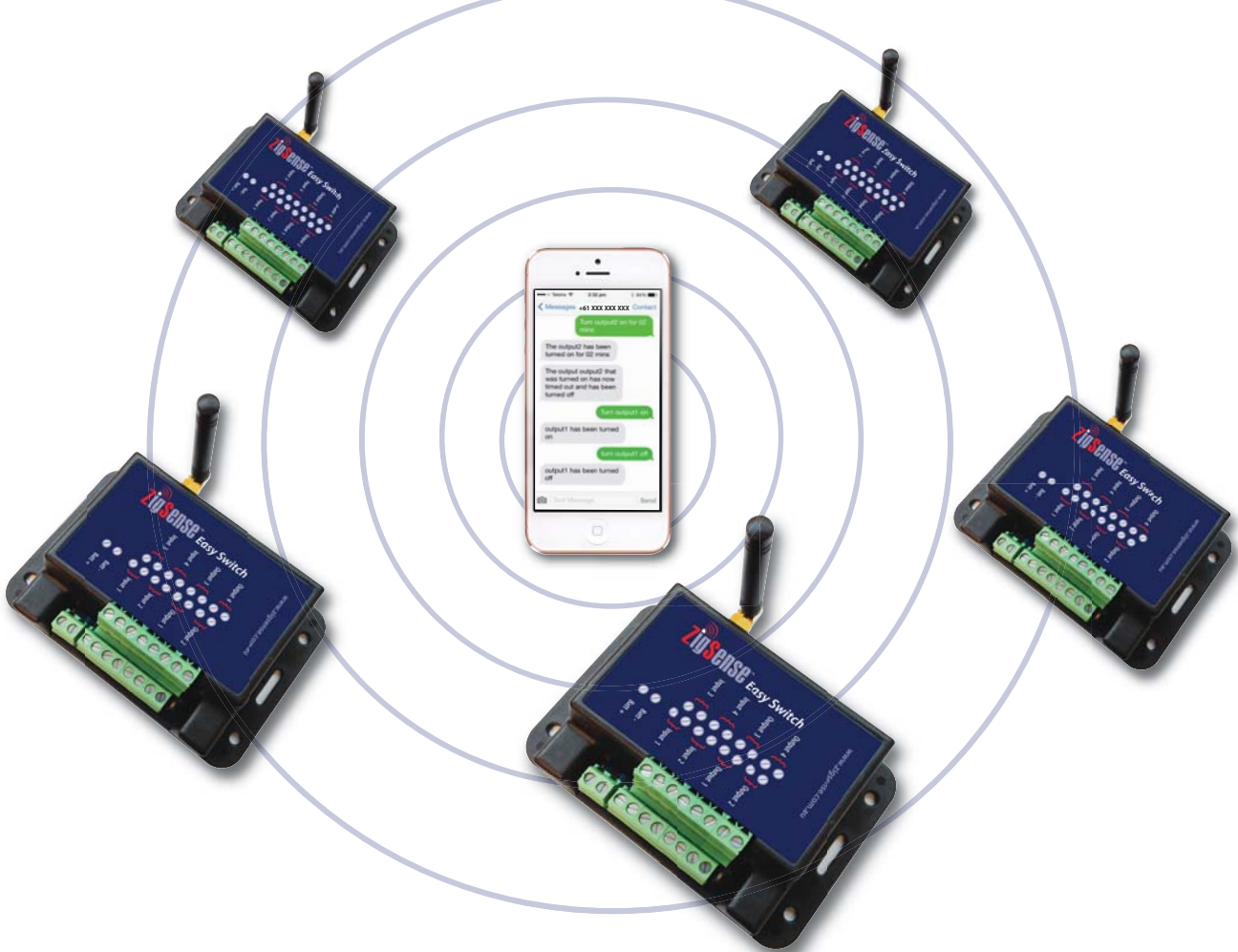
The tank level controller supports two Inputs where one Analog input monitors the tank level and the other monitors digital conditions.

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 predefined set point.

After clearing its settings, the SMS I/O controller can return to its standard SMS digital I/O 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

ZS3G-SMS-Temp-2 Temperature: 1xTemperature + 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



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