# GSM Modem (GPRS/SMS)

Tekelek's GSM modem is compatible with the Tekelek liquid and gas fuel level tank sensors, and with the residential burner lockout/temperature sensor, providing reliable communications to the Tekelek remote server monitoring system (RMS) that monitors the tank fuel levels, central heating burner operation, and room temperatures.

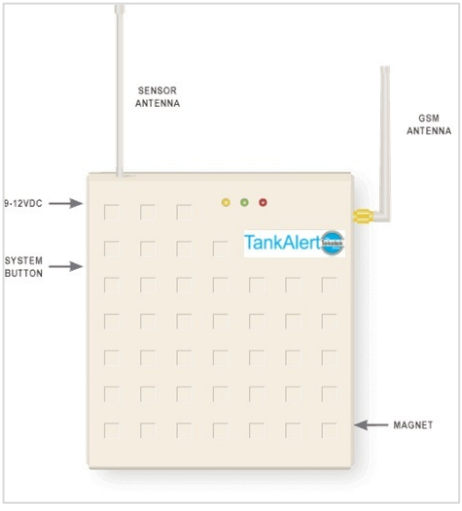
With turnkey development, it could be used with other OEM wireless sensors to relay data to a 3rd party server/webserver application.

## Applications

- Remote monitoring with Tekelek sensors of:
  - Burner lock-out
  - Room temperature
  - Fuel tank liquid level
  - LPG/Propane tank level
- General remote monitoring of OEM wireless (433/914 MHz) sensors – contact Tekelek

## Benefits

- Enables sensors to be remotely monitored
- Monitor up to 6 sensors
- Mix and match sensors to your needs
- Delivers data at a determinable schedule
- Immediate threshold broken notification (High/Low/Fill or Drain)
- Powered by standard 9v mains to DC power supply
- Optional Battery Backup
- 914/433 MHz versions available for global use
- Quad band GSM module (850/900/1800/1900 MHz)
- GPRS or SMS operation
- Can be configured and interrogated via RMS software or a standard mobile phone
- Compatible with current and future Tekelek sensors
- Use with OEM sensors possible – contact Tekelek




**WEEE Reg. 00232**
Patents granted

Tekelek, Shannon Free Zone, Shannon, Co. Clare, Ireland
**Tel :** +353 (0)61 471511 | **Fax:** +353 (0)61 471685
**E-mail:** sales@tekelek.com | **Web:** www.tekelek.com

# Specification

| Characteristic | Parameter |
|---|---|
| Dimensions | 107mm (W) x 25mm (D) x 120mm (H) 4.21" (W) x 1" (D) x 4.72"(H) excluding antennas |
| Weight | 200g/0.44lbs |
| Housing Material | ABS |
| Operating temperature | -10°C to 60°C/14°F to 140°F |
| Storage Temperature | -20°C to 60°C/-4°F to 140°F |
| Humidity range | 20% to 80% non-condensing |
| Altitude range | <2Km/1.25miles above sea level |
| Environmental Protection | Indoor use only |
| Radio frequency | 433.92 MHz FM (EU/UK/NZ/AUS) or 914.5 MHz FM (USA) options available |
| Receiver sensitivity | -100dBm to -110dBm @ 0.001 BER |
| Sensor to Modem Radio range | 200m (433.92MHz) / 150ft (914MHz) with Tekelek sensors |
| GSM module | 2G Quad band 850/900/1800/1900 |
| Power requirements (DC) | Mains (110VAC or 220VAC) to DC separate supply required. 9V Unregulated 500mA |
| PSU DC jack size | 2.5mm/0.1" |
| Status indication | Three LEDs, Green, Amber & Red indicate status regarding sensor synchronisation, sensor activity, GSM activity, and power. |
| Sensor synchronisation | Integrated magnet to activate Tekelek sensors into teach mode |
| Server system connection | Push button to force off schedule server contact during installation |


# Conformity

| | |
|---|---|
| EU/UK/NZ/AUS variants meet the intent of Directive 89/336/EEC for Electromagnetic compatibility and the Low voltage directive 73/23/EEC for product safety and the R&TTE directive 1999/5/EC for radio. Compliance was demonstrated to the following specifications as listed in the official journal of the European Communities. USA variants compliant to FCC part 15 in UL approved test facility. | |
| EN 55022,A1,A2 | Limits and methods of measurement of radio disturbance characteristics of information technology equipment. |
| EN 61000 | Electromagnetic compatibility |
| EN 55011 | Industrial, scientific and medical (ISM) radio-frequency equipment |
| EN 60335-1 | Safety of household and similar appliances |
| EN 300 220-3 | Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD); |
| ETSI EN 301 489-1 | ERM and EMC standard for radio equipment and services Part1 |
| ETSI EN 301 489-3 | Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) |
| ETSI EN 301 489-7 | Electro-magnetic Compatibility and Radio Spectrum Matters (ERM); Electro-magnetic Compatibility (EMC) Standard for Radio Equipment and Services; Part 7: Specific Conditions for Mobile and Portable Radio and Ancillary Equipment of Digital Cellular Radio Telecommunications Systems (GSM and DCS) |
| RoHs Compliance | Yes |
| FCC part 15 compliance | USA variant |

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