# GSM modem

## GDW-11 485 EX

⠿ Cost effective legacy remote access solution
- Traditional AT command modem
- RS-232 or RS-422/485 serial data
- Dual band GSM 900/1800 MHz

⠿ Designed for use in harsh industrial applications
- 10 – 60 VDC power input
- Total galvanic isolation
- ATEX Zone 2 – Ex nA IIC T4 Gc

⠿ Robust for long service life
- 1,100,000 hours MTBF to MIL-HDBK-217K
- –25 to +50°C (–13 to +122°F) with no moving parts
- Industrial EMC, shock and vibration testing

⠿ Easy to use
- Windows drivers and GD-tool configuration software
- Event triggered SMS, DTR and data dialing
- DIP switch configuration

CE   FC *Part 15*   Ex

**EN 61000-6-2**
Industrial Immunity

**EN 61000-6-3**
Residential Emission

**EN 50121-4**
Railway Trackside

The GDW-11 485 EX is an ATEX certified modem designed to allow connection of legacy RS-232, RS-422 and RS-485 serial equipment over a GSM/GPRS network. The AT command driven modem operates over the GSM/GPRS networks providing speed up to 14.4 kbit/s on GSM or 85.6 kbit/s when using GPRS.

The GDW-11 485 EX is designed for use in heavy duty industrial applications. The wide power range, galvanic isolation and the design of the termination and fail-safe circuit guarantees communication in the worst environments.

Only industrial grade components are used which gives the GDW-11 485 EX an MTBF of 1,100,000 hours and ensures a long service life. A wide operating temperature range of –25 to +50°C (–13 to +122°F) is achieved with no moving parts. The GDW-11 485 EX has been tested both by Westermo and external test houses to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments and rail trackside applications.
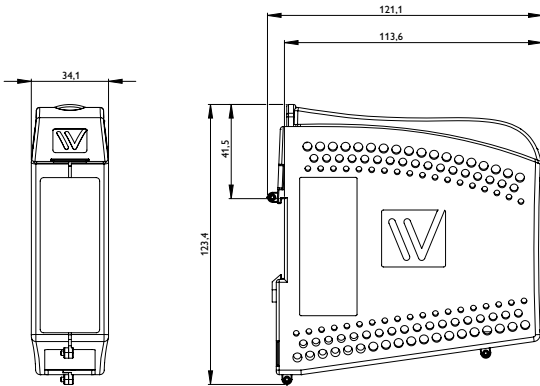
The modem is simple to configure both by DIP switches as well as by the Westermo GD-tool software; standard commands can easily be entered, and saved configurations downloaded. RS-232 connections can be made using screw connections as well as the standard D-sub. The modem is designed to be connected to devices with no ability to control dialing so special functions like data dialing and DTR dialing are provided to enable these devices to automatically establish connections.

## Ordering Information

| Art.no | Description |
| --- | --- |
| 3615-5030 | GDW-11 485 EX, 899 / 1 800 MHz, Data, Fax, SMS, TCP/IP, RS-485, 10–60 VDC, ATEX |

# Specifications GDW-11 485 Ex

## Dimensional drawing



| Dimension W x H x D | 34 × 123 × 121 mm (1.33 × 4.84 × 4.76) |
|---|---|
| Weight | 0.2 kg |
| Degree of protection | IP 21 |

| Power | |
|---|---|
| Operating voltage | 10 to 60 VDC |
| Rated current | 350 mA @ 12 VDC |
| | 150 mA @ 24 VDC |
| | 75 mA @ 48 VDC |

| Interfaces | |
|---|---|
| RS-232 | 1 × 300 bit/s – 115.2 kbit/s |
| RS-422/485 | 1 × 1200 bit/s – 115.2 kbit/s |
| Antenna | 1 × GSM900 TX 880 – 915 and RX 925 – 960 MHz |
| | 1 × GSM1800 TX 1710 – 1785 and RX 1805 – 1880 MHz |
| SIM | 1 × SIM slot (3 volts SIM supported) |

| Temperature | |
|---|---|
| Operating | –25 to +50°C (–13 to +122°F) |
| Storage & Transport | –30 to +85°C (–22 to +185°F) |
| Maximum surface temperature | 135°C (275°F) (temperature class T4) |

| Agency approvals and standards compliance | |
|---|---|
| EMC | EN 61000-6-2, Immunity industrial environments |
| | EN 61000-6-3, Emission residential environments |
| | EN 55024, Immunity IT equipment |
| | FCC part 15 Class B |
| | EN 50121-4, Railway signalling and telecommunications apparatus |
| | IEC 62236-4, Railway signalling and telecommunications apparatus |
| Safety | EN 60950, IT equipment |
| Atex | EN 60079-0, Explosive atmospheres – General requirements |
| | EN 60079-15, Explosive atmospheres – Construction, test and marking of type of protection ''n'' electrical apparatus |