

EX Approved Ethernet extender with serial support

DDW-226-EX

- ⌘ Global approval for hazardous area use
 - IECEx, International EX standard
 - ATEX 94/9/EC, EU directive
- ⌘ Save time and money reusing old cable and equipment
 - Up to 15.3 Mbit/s Ethernet over twisted pair cables
 - Legacy connection via RS-232 port
 - Easy and quick to configure with WeOS
- ⌘ Designed for use in harsh industrial applications
 - Dual 16 – 60 VDC power input
 - Extensive line diagnostics and fault I/O contact
 - TBU – transient blocking unit
- ⌘ Robust for long service life
 - 370,000 hours MTBF to MIL-HDBK-217K
 - -40 to +70°C (-40 to +158°F) with no moving parts
 - Industrial EMC, shock and vibration testing



The Wolverine DDW-226-EX is an Industrial Ethernet Extender, powered by the Westermo WeOS network operating system. Independently tested for IECEx and ATEX by Baseefa, the Wolverine is the perfect solution for hazardous area applications in any part of the world.

The DDW-226-EX allows effective Ethernet networks to be created over long distances (up to 15 km) at data rates up to 15.3 Mbit/s. The SHDSL technology makes it possible to reuse many types of pre-existing copper cables which can lead to considerable financial savings. Dependent on cable characteristics, distances up to 15 km (9.3 mi) can be achieved. The combination of WeOS and the integrated RS-232 port allows legacy equipment to become part of an IP backbone network.

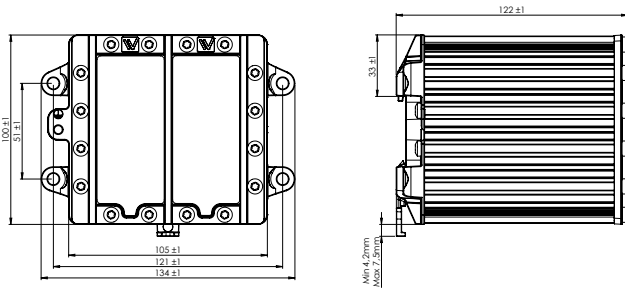
With its robust aluminium housing, the DDW-226-EX is designed for use in heavy duty industrial applications. The wide power range and I/O fault contact make it ideal for easy installation and monitoring in industrial applications.

Only industrial grade components are used which gives the DDW-226-EX an MTBF of 370,000 hours and ensures a long service life. A wide operating temperature range of -40 to +70°C (-40 to +158°F) can be achieved without the need for moving parts or cooling holes in the case. The DDW-226-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.

Ordering Information

| Art.no | Description |
|-----------|--|
| 3642-5240 | DDW-226-EX |
| 1211-2027 | CLI Cable (Console) (Accessories) |
| 1211-2210 | RJ-45 to DB9 cable (Accessories) |
| 3125-0001 | PS-30, Power supply, DIN mounted (Accessories) |

Specifications DDW-226-EX



Dimension W x H x D 134 x 100 x 122 mm (5.25 x 3.93 x 4.80 in)
 Weight 1.5 kg
 Degree of protection IP40

| Speed bit/s | DDW-226-EX @ 0.5 mm ² | DDW-226-EX @ 0.4 mm ² |
|-------------|----------------------------------|----------------------------------|
| | Distance metre / miles | Distance metre / miles |
| 192000 | 10000 / 6.21 | 6450 / 4.00 |
| 1024000 | 7650 / 4.75 | 4850 / 3.01 |
| 1280000 | 7050 / 4.38 | 4700 / 2.92 |
| 2304000 | 5950 / 3.69 | 4150 / 2.58 |
| 3328000 | 4900 / 3.04 | 3700 / 2.30 |
| 4544000 | 4250 / 2.64 | 3150 / 1.95 |
| 5696000 | 3650 / 2.26 | 2800 / 1.73 |
| 6200000 | 3000 / 1.86 | 2250 / 1.39 |
| 6712000 | 2500 / 1.55 | 1875 / 1.1 |
| 8760000 | 2000 / 1.24 | 1500 / 0.93 |
| 10296000 | 1500 / 0.93 | 1125 / 0.69 |
| 12344000 | 1000 / 0.62 | 750 / 0.46 |
| 15304000 | 700 / 0.43 | 525 / 0.32 |

Distance is tested without noise.

| Power | |
|-------------------|------------------------------------|
| Operating voltage | 16 to 60 VDC |
| Rated current | 330 mA @ 20 VDC 150 mA @ 48 VDC |

| Interfaces | |
|-------------|--|
| Console | 1 x 2.5 mm jack, use Westermo cable 1211-2027 |
| USB | 1 x USB 2.0 host interface |
| Digital I/O | 1 x 4-position detachable screw terminal |
| Ethernet TX | 4 x RJ-45, 10 Mbit/s or 100 Mbit/s |
| DSL | 2 x 2-position detachable screw terminal, 32 kbit/s to 15.3 Mbit/s |
| RS-232 | 1 x RJ-45, 300 bit/s to 115.2 kbit/s |

| Temperature | |
|-----------------------------|--------------------------------------|
| Operating | -40 to +70°C (-40 to +158°F) |
| Storage & Transport | -40 to +85°C (-40 to +185°F) |
| Maximum surface temperature | 135°C (275°F) (temperature class T4) |

| Agency approvals and standards compliance | |
|---|---|
| EMC | EN 50121-4, Railway signalling and telecommunications apparatus. |
| | EN 61000-6-1, Immunity residential environments. |
| | EN 61000-6-2, Immunity industrial environments. |
| | EN 61000-6-3, Emission residential, commercial and light-industrial environments. |
| | EN 61000-6-4, Emission industrial environments. |
| Safety | UL/IEC/EN 60950-1, IT equipment. |
| SHDSL | ITU-T G.991.2. |
| IECEx | Explosive atmosphere |
| | IEC 60079-0, General requirements |
| | IEC 60079-15, Equipment protected by type of protection "n" |
| ATEX | Explosive atmosphere |
| | EN 60079-0, General requirements |
| | EN 60079-15, Equipment protected by type of protection "n" |