



Technical specification - Modul-Connect Hub

Note: The specifications are subject to change without notices.

| 24000-04 Modul-Connect Hub | |
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| Operation | Switching and control of auxiliary electrical equipment for light commercial vehicle applications |
| Homologation | UN ECE Regulation No. 10. Revision 5:2014 CE |
| System voltage range | 9-16 Vdc |
| Standby current | 40mA without telematics, 80mA with telematics |
| DC Input Fuse protection | External Dc input fuse required 40amps to 400amps |
| DC output | 2x 30A, 4x 20A, 1x 350A Max limited by 400A max input fuse |
| Wago connectors | 2x 30A, 4x 20A, per port |
| Molex Connector (Digital I/O, pin 1-5, 9-12) | Molex connector outputs are designed to be used as low current signal outputs but could be used to supply low current loads in specific cases, when all regular load outputs are occupied. Care must be taken in multi battery installations, see below. |
| Installations with only one battery (vehicle and Modul-Connect supplied from the same battery). | Maximum load on a single output: 500 mA Max total load on Molex outputs: 1.5 A |
| Installations without any discrete 12V input signals supplied from another battery source into Molex connector. (E.g. ignition) | Maximum load on a single output: 500 mA Max total load on Molex outputs: 1.5 A |
| Installations with discrete 12V input signals (e.g. ignition) supplied from another battery source but interfaced through a relay to the Modul-Connect battery source. | Maximum load on a single output: 500 mA Max total load on Molex outputs: 1.5 A |
| Installations with discrete 12V input signals (e.g. ignition) supplied from another battery source but with all input signals connected in series with a 10 kΩ, 0.25W resistor. | Maximum load on a single output: 500 mA Max total load on Molex outputs: 1.5 A |
| For installations with discrete 12V input signals from a different battery than Modul-Connect supply connected directly to the Molex connector (without series resistor). E.g. Ignition signal driven from vehicle starter battery, when Modul-Connect is supplied with auxiliary battery. | Maximum load on a single output: 500 mA Max total load on Molex outputs: 600 mA |
| Inverter + 12v stud | Fused at 350A max |
| Communication | |
| Bluetooth | High security BLE5 |
| CAN | 3x separate CAN accessible through Molex Connector |
| Max operating communication distance BLE5 | 100m (clear line of sight) |
| Max internal vehicle operating communication distance | 8m |
| LTE bands | Twelve Bands FDD-LTE: 700, 800, 850, 900, 1700/2100 (AWS), 1800, 1900, 2100, 2600 MHz (bands 1, 2, 3, 4, 5, 7, 8, 12, 18, 19,20, 28) |
| 3G bands | Seven Bands UMTS (WCDMA/FDD): 800, 850, 900, 1700/2100 (AWS), 1800, 1900 and 2100 MHz (bands 1, 2, 4, 5, 8, 9, 19) |
| 2G bands | Quad Band GSM: 850, 900, 1800 and 1900 MHz |
| GPS | 72-channel u-blox M8 engine GPS/QZSS L1 C/A, GLONASS L10F BeiDou B1I, Galileo E1B/C SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN |
| Vehicle DC power connection | M8 +12v Stud |
| Battery guard activate | All outputs configurable via APP and stabilization delay of 2 minutes |
| Battery guard de-activate | Stabilization delay of 15 seconds |
| Operating Temperature | -35°C to 70°C at full load |
| Operating Altitude | Up to 3000 meters above sea level |
| Weight | 1.2 kg |
| Dimensions | 260 x 47 x 166 mm |