

A RailIOS® Certified Device

Telecom Box

Small • Light • Scalable

The Telecom Box is The Signalling Company's multi-network gateway, providing access to GSM-R, 4/5G, GNSS (GPS) and FRMCS services. It is a RailIOS® compatible and certified device, mounting directly to the vehicle frame in any orientation and in any available space. Like its sister products, The Telecom box has a tiny installation footprint, minimal cabling and low energy consumption. It simplifies installation and maintenance, requires no cab redesign, and optimizes energy consumption.



Technical Specifications

General Performance

| Parameter | Specification | Compliance -or- Reference Conditions |
|----------------------|-----------------------------------|--------------------------------------|
| Operating System | RailIOS | |
| Network Options | GSM-R, GPRS, LTE, 5G, FRMCS / GPS | Telecom / GNSS |
| Design (Use) Life | 20 Years | EN 50155 / L4 |
| MTBF | 805,123 Hours | EN 50126 RAMS |
| System Interfaces | 4 x Fast Ethernet | |
| System Communication | Ethernet / TRDP | IEEE 802.1, IEEE |
| Antenna Interfaces | 2 x 4G/GPS Coax, 2 x GSM-R Coax | |



Electrical

| Parameter | Specification | Compliance -or- Reference Conditions |
|--------------------------|-------------------------|--------------------------------------|
| Supply Voltage | 24 VDC to 110 VDC | EN 50155 |
| Power Consumption | 20 W Typical / 70 W Max | |
| Power Interruption Class | Class S2, ≤10 ms | EN50155 |
| Inrush Current | 3 Amp | |

Environmental

| Parameter | Specification | Compliance -or- Reference Conditions |
|-----------------------|-------------------------------|--------------------------------------|
| Operating Temperature | -25°C to +70°C | EN 50155 OT3 IP20 |
| | -25°C to +55°C (option) | EN 50155 OT1 IP53 |
| Ingress Protection | IP20 or IP53 (option) | EN 60529 |
| Altitude | 2,000 m Above Sea Level | EN 50155 |
| Humidity | 5% to 95% RH (non-condensing) | EN 50125-1 / Class A1 |
| Shock and Vibration | Cat 1 Class B | EN 61373 |
| Hazardous Substances | RoHS | Directive 2011/65/EU |
| Storage Temperature | -40 to +85 °C | EN 50125-1 / Class A1 |
| Fire Resistance | Hazard Level 3 | EN45545-2 |

Mechanical

| Parameter | Specification | Compliance -or- Reference Conditions |
|----------------------|----------------------------|--------------------------------------|
| Dimension | 288.4 x 377 x 222 mm | W x D x H |
| Weight | 15.4 kg | Operation / Storage |
| Mounting Orientation | Any. Direct Mounting. | No 19in Rack / No Special Tooling |
| Connector Types | Power : 2 x Amphenol | Military Grade : LJT MIL-DTL-38999 |
| | Antennas : 4 x CoAx | |
| | Ethernet : 2 x Amphenol | |
| Enclosure Material | Aluminium and Inox (Steel) | |

