Industrial Routing Switch
RFI-211-F4G-T7G-EX

- ▦ Global approval for hazardous areas and maritime usage
  - IECEx, International EX standard
  - ATEX 94/9/EC, EU directive
  - DNV and GL approved
- ▦ Designed for demanding Edge Network applications
  - 11 ports, all gigabit
  - Advanced WeOS layer 3 functionality
  - Low power consumption DC supply
- ▦ Robust for long service life
  - 336,000 hours MTBF to MIL-HDBK-217K
  - –40 to +70 °C without ventilation holes
  - Industrial and trackside type tested
- ▦ Unique future proof industrial networking solutions
  - Simple web configuration with professional CLI
  - Network IP Security and remote access
  - Multiple network resilience solutions

CE FC Part 15 c(UL)us LISTED DNV·GL TYPE APPROVED PRODUCT MARITIME ATEX IEC IECEx

EN 50121-4	EN 55022	EN 55024	EN 61000-6-1	EN 61000-6-2	EN 61000-6-3	EN 61000-6-4
Railway Trackside	ITE Emission	ITE Immunity	Residential Immunity	Industrial Immunity	Residential Emission	Industrial Emission

RedFox EX is a high performance layer 3 industrial Ethernet switch designed for high network traffic applications in EX environments. RedFox EX is independently tested for IECEx and ATEX by Baseefa. This makes RedFox EX perfect for hazardous area applications in any part of the world. Various port configurations are available that can be further customised with SFP transceivers. RedFox EX is powered by the Westermo WeOS network operating system.

The RedFox EX is designed for use in heavy duty industrial applications in its robust aluminium housing. Its 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 RedFox EX an MTBF of 336,000 hours and ensures a long service life. A wide operating temperature range –40 to +70 °C (–40 to +158 °F) can be achieved with no moving parts or cooling holes in the case. RedFox 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 application.

WeOS has been developed by Westermo to allow us to offer cross platform and future proof solutions. WeOS can deliver unique IP security functionality for this class of product, for instance a Multiport DMZ can be constructed by utilising the internal port based firewall function. Remote secure access to a network can be provided using encrypted VPNs. *For more WeOS functionality please see the WeOS datasheet.*

Ordering Information

Art.no	Description
3641-5310	RFI-211-F4G-T7G-EX, Industrial routing switch

Specifications RFI-211-F4G-T7G-EX

Dimensional drawing
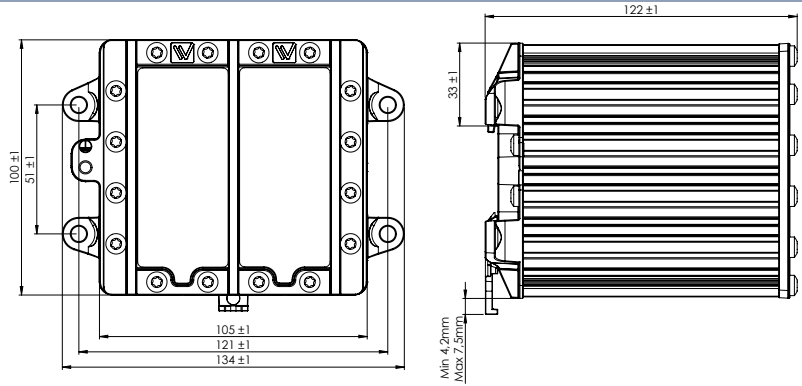
Weight	1.5 kg
Degree of protection	IP 40
Dimension	134 × 100 × 122 mm (5.25 × 3.93 × 4.80 in)

Power

Operating voltage	16 to 60 VDC
Rated current	0.87 (1.06*) A @ 20 VDC 0.35 (0.43*) A @ 48 VDC

*With 500mA USB load

Interfaces

Console	1 × USB Micro-B connector
USB	1 × USB 2.0 host interface
Digital I/O	1 × 4-ports detachable screw terminal
Ethernet	7 × 10/100/1000 Mbit/s, Gigabit Ethernet TX, RJ-45 4 × 100/1000 Mbit/s, pluggable connections transceivers supported, Ethernet FX or TX SFP.

Temperature

Operating	−40 to +70 °C (−40 to +158 °F)
Storage & Transport	−50 to +85 °C (−58 to +185 °F)
Maximum surface temperature	135 °C (275 °F) (temperature class T4)

Agency approvals and standards compliance

EMC	EN 50121-4, Railway applications – Electromagnetic compatibility – Emission and immunity of the signalling and telecommunications apparatus
	EN 55022, Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
	EN 55024, Information technology equipment – Immunity characteristics Limits and methods of measurement
	EN 61000-6-1, Electromagnetic compatibility – Immunity for residential, commercial and light-industrial environments
	EN 61000-6-2, Electromagnetic compatibility – Immunity for industrial environments
	EN 61000-6-3, Electromagnetic compatibility – Emission standards for residential, commercial and light industrial environments
	EN 61000-6-4, Electromagnetic compatibility – Emission standard for industrial environments
	FCC part 15 Class A
Safety	UL/IEC/EN 60950-1, IT equipment
Marine	DNV Standard for Certification no. 2.4
IECEx	Explosive atmosphere: IEC 60079-0, General requirements IEC 60079-15, Equipment protected by type of protection ''n'' IEC 60079-28, Protection of equipment and transmission systems using optical radiation
ATEX	Explosive atmosphere: EN 60079-0, General requirements EN 60079-15, Equipment protected by type of protection ''n'' EN 60079-28, Protection of equipment and transmission systems using optical radiation