

JANUS Reader. The next-generation reader from Kapsch TrafficCom IVHS.



Taken from the name of the mythological God of Gateways, the JANUS® Reader is the high performance, next-generation reader from Kapsch TrafficCom IVHS. JANUS takes accurate transponder identification and reliable revenue capture to the next level in an updated design. It is fully compatible with the IAG protocol and Badger lane controller interfaces. The result is an extraordinarily flexible reader that either replaces IAG Badger readers, or seamlessly synchronizes with existing Badger readers to add lane capacity.

Scalability

The next-generation JANUS Reader is designed to achieve high performance transponder reading in open road toll collection environments. It supports up to 8 RF channels or 5 ORT channels.

Key Benefits

- High lane discrimination performance at single and multi-reader sites
- Processes transactions at least two times faster than Badger readers
- Increases transaction memory capacity
- Provides more efficient and cost-effective diagnostic data gathering
- Simplifies system configuration, diagnostics and overall maintenance
- Faster reader to lane controller communications

Meets IAG Technical Specifications

- Active read/write at 500 kbps
- Supports up to 8 RF channels (5 ORT channels)
- 16 high-speed serial ports with 8 master ports and 8 secondary ports with speed-doubled 115.2 kbps data rates
- Enhanced channel voting and weighting logic
- Protocol compatibility for high-speed synchronization between JANUS and Badger readers
- Compatibility with existing RF modules and antenna networks
- Ethernet communications for reduced latency
- Standard connectivity and optional web connection with SSL encryption security features
- Fast 5 ms transaction processing
- Remote monitoring, diagnostics, configuration

and software update capabilities

- Memory capacity of 400,000 buffered transactions
- USB interface
- Network time synchronization support
- Intuitive browser interface



JANUS Reader Technical Specifications:	
Operating Frequency:	915.75 MHz (nominal center using FCC RF module)
Dimensions (W x H x D):	19.0 in. rack-mountable; rack 9U high 19.0 x 15.8 x 10.8 in. 48.26 x 40.13 x 27.43 cm
Weight:	63 lbs. (excluding cabinet) 28.6 kg
Buffered Data Capacity:	400,000 transactions
Data Format:	Manchester Keyed Carrier
Data Rate:	500 kbps ± 10 % (uplink/downlink)
Operating Temperature:	-37°C to +74°C -34°F to +185°F
Storage Temperature:	-45°C to +93°C -49°F to +199°F
Relative Humidity:	5 % to 95 % non-condensing
Vibration:	NEMA TS-1
Shock:	NEMA TS-1
Input Power/Consumption:	145 W @ 110 VAC, UL/CSA power supply
Regulatory:	Makes use of FCC Part 15 compliant RF module(s) UL60950-1. Part 90 site license required for operation in the USA
Compatibility:	JANUS Interior, JANUS FME Exterior, JANUS Feedback as well as IAG style 256-bit transponders, including ROADCHECK FPT, LPT, RMT and FUSION®
Maximum Cabling Distance:	200 ft. assuming IAG-1 antenna and using LMR-400-DB cabling
Communications Interface:	200 ft. assuming IAG-1 antenna and using using LMR-400-DB cabling. 8 serial ports. RS-232-C interface. Up to 115.2K asynchronous. Optional RS422-A interface. Sync port. Ethernet 10/100/1000. Diagnostic port. USB port (2). Ethernet 10/100.
Options:	Also available in non-redundant and/or Ethernet only versions

Kapsch Group

The Kapsch Group and its entities Kapsch TrafficCom, Kapsch CarrierCom and Kapsch BusinessCom are specialised in the future-oriented market segments of Intelligent Transportation Systems (ITS) and Information and Communication Technology (ICT). Kapsch. Always one step ahead.

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