

JANUS Multiprotocol Reader.

High performance, multiprotocol reader from Kapsch.



Based on Kapsch's high performance, next-generation reader platform, the JANUS® Multiprotocol Reader (MPR) is a cost-effective, multi-lane capable reader that offers redundancy features and builds upon the industry-leading performance of Kapsch's predecessor system, with the addition of new features and even greater reliability. The JANUS MPR takes accurate transponder identification and reliable revenue capture to the next level in an updated design. New features, including an open source operating platform and the availability of industry standard interfaces allow for easy expansion and integration. The multiprotocol design approach makes very efficient use of the available communication time interval thereby maximizing capture performance and identification accuracy for all supported protocols. The modular architecture of JANUS results in an extraordinarily flexible reader that adds multiprotocol capture capability to new or existing lanes and means that existing customers can upgrade to a multiprotocol configuration when business requirements dictate.

Performance enhancements include fractional lane assignment that delivers improved system operations and better enforcement capabilities. Further, the high-position resolution analysis can automatically adapt to traffic speed. Dynamically adjustable output power and input sensitivity coupled with more efficient use of bandwidth deliver even greater success capturing and writing to mismatched transponders. The JANUS reader

has a buffered transaction capacity five times greater than its predecessor and is capable of auto switch-over recovery to preserve optimal performance. Administration of the JANUS reader is completed through an intuitive Web interface that supports remote diagnostics, including RF power and sensitivity adjustments per antenna, firmware update management and system performance monitoring.

Scalability

The single-antenna-per-lane architecture of a JANUS reader can support up to eight lane-based or five open road tolling (ORT) channels in Kapsch proprietary lane-based TDM-only configuration. With JANUS RF Modules, the reader can support four lane-based or two ORT lanes and a shoulder in multiprotocol configuration.

JANUS Multiprotocol Technical Specifications:	
Operating Frequency:	902 to 928 MHz
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 Capacity:	400,000 transactions
Error Checking:	Cyclic Redundancy Check
Operating Temperature:	-20°C to +60°C -4°F to +140°F
Storage Temperature:	-40°C to +65°C -40°F to +149°F
Vibration:	NEMA TS-1
Shock:	NEMA TS-1
Relative Humidity:	5 % to 95 % non-condensing
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:	For lane-based or open road tolling applications: Kapsch JANUS Interior, JANUS FME Exterior, JANUS Feedback as well as Kapsch 256-bit transponders, including ROADCHECK FPT, LPT, RMT and FUSION®
Communications Interface:	Consult factory for details and available options
RF Channel Capacity:	In TDM-only mode: support up to 8 lane-based or 5 ORT channels. In multiprotocol mode: Supports 4 lane-based or up to 2 ORT lanes and a shoulder. Option to connect multiple readers to support additional lanes

with all lanes and protocols reporting on a common network connection.

Key Benefits

- Supports Kapsch’s TDM, ISO 18000-6B, ISO 18000-6C and ISO 10374/ATA/AAR S-918 protocols
- High lane discrimination performance at single and multi-reader sites
- Increased 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



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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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