

DATA SHEET
RUCKUS® OT-25G-LR-1310-SM Optical Transceiver

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Industry-Leading Optical Transceiver for Enterprise Environment

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Next-generation network solution delivering exceptional performance, reliability, and security

EXECUTIVE SUMMAR

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is a cutting-edge, high-performance solution designed to meet the demands of modern enterprise networks. This next-generation optical transceiver is engineered to deliver exceptional performance, reliability, and security, making it an ideal choice for organizations seeking to future-proof their network infrastructure.

By leveraging the latest advancements in optical technology, the RUCKUS OT-25G-LR-1310-SM Optical Transceiver offers unparalleled speed, scalability, and flexibility. With its compact form factor and low power consumption, this transceiver is perfect for deployment in a wide range of environments, from data centers and cloud computing facilities to enterprise offices and educational institutions.

Key business benefits of the RUCKUS OT-25G-LR-1310-SM Optical Transceiver include:

- Enhanced performance: Achieve speeds of up to 25.78125 Gbps and support for multiple protocols, including IEEE 802.3cc (25GBASE-LR)
- Simplified management: Enjoy seamless integration with RUCKUS management platforms, including SmartZone, RUCKUS One, and Unleashed
- Advanced security: Benefit from robust security features, including WPA3, 802.1X authentication, and role-based access control
- Scalability and future-proofing: Easily upgrade and expand your network infrastructure to meet growing demands
- Operational efficiency: Reduce costs and improve productivity with energy-efficient design and simplified management
- Reliability and uptime: Enjoy high availability and reliability, with features such as digital diagnostics and real-time monitoring

By deploying the RUCKUS OT-25G-LR-1310-SM Optical Transceiver, organizations can achieve significant business outcomes, including:

- Improved network performance and scalability
- Enhanced security and compliance
- Reduced operational costs and improved productivity
- Increased reliability and uptime
- Future-proofing and flexibility

KEY BUSINESS BENEFIT

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Unleashed Performance:** Achieve speeds of up to 25.78125 Gbps and support for multiple protocols, including IEEE 802.3cc (25GBASE-LR)

- ****Simplified Management**:** Enjoy seamless integration with RUCKUS management platforms, including SmartZone, RUCKUS One, and Unleashed
- ****Advanced Security**:** Benefit from robust security features, including WPA3, 802.1X authentication, and role-based access control
- ****Scalability & Future-Proofing**:** Easily upgrade and expand your network infrastructure to meet growing demands
- ****Operational Efficiency**:** Reduce costs and improve productivity with energy-efficient design and simplified management
- ****Reliability & Uptime**:** Enjoy high availability and reliability, with features such as digital diagnostics and real-time monitoring

ADVANCED FEATURES & CAPABILITIES

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Core Technology Feature

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is built on a robust and reliable platform, featuring:

- Digital diagnostics: Real-time monitoring of temperature, voltage, bias current, TX power, and RX power
- Hot-pluggable: Easy installation and removal without disrupting network operations
- EEPROM: 256 bytes user-accessible via I2C interface

Performance Optimization

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to deliver exceptional performance, with features such as:

- High-speed data transfer: Achieve speeds of up to 25.78125 Gbps
- Low latency: Minimize packet delay and ensure seamless communication
- High reliability: Enjoy high availability and reliability, with features such as digital diagnostics and real-time monitoring

Security & Compliance

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is engineered to meet the most stringent security and compliance requirements, with features such as:

- WPA3: The latest Wi-Fi security standard, providing robust encryption and authentication
- 802.1X authentication: Secure network access with user authentication and authorization
- Role-based access control: Granular access control and permission management

Management & Control

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed for seamless integration with RUCKUS management platforms, including:

- SmartZone: Comprehensive network management and control
- RUCKUS One: Cloud-based network management and analytics

- Unleashed: Easy-to-use network management and control

COMPREHENSIVE TECHNICAL SPECIFICATION

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Wireless Performance Specification

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Specification	Value
Wireless Standards	IEEE 802.3cc (25GBASE-LR)
Frequency Bands	1310 nm ± 6.5 nm
Maximum Data Rate	Up to 25.78125 Gbps
Spatial Streams	Multi-stream MIMO
MIMO Configuration	4x4:4 MU-MIMO
Antenna Technology	BeamFlex+ adaptive antennas
Maximum Concurrent Clients	512+ concurrent users
SSID Support	32 SSIDs per radio

RF Performance Specification

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Frequency Band	Transmit Power	Receive Sensitivity
1310 nm	-8 to +2 dBm	-14.4 dBm

Physical & Environmental Specification

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Specification	Value
Dimensions (H x W x D)	56.5 mm (L) x 13.4 mm (W) x 8.5 mm (H)
Weight	≤ 10 grams
Power Consumption	Energy efficient

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Operating Temperature	0°C to +70°C
Humidity Rating	0-95% non-condensing
Mounting Options	Ceiling/wall/desk mount

Network & Interface Specification

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Specification	Value
Ethernet Ports	Gigabit Ethernet
PoE Requirements	PoE+ / PoH support
Console/Management	HTTPS, SSH, SNMP

DEPLOYMENT SCENARIOS & USE CASE

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Enterprise Office Environment

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is ideal for deployment in enterprise office environments, where high-speed data transfer and low latency are critical. With its compact form factor and low power consumption, this transceiver is perfect for deployment in a wide range of environments, from data centers and cloud computing facilities to enterprise offices and educational institutions.

Educational Institution

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to meet the unique needs of educational institutions, where high-speed data transfer and low latency are critical. With its robust security features and seamless integration with RUCKUS management platforms, this transceiver is perfect for deployment in schools and universities.

Healthcare Facilitie

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is engineered to meet the most stringent security and compliance requirements of healthcare facilities, where patient data and medical records are sensitive. With its robust security features and seamless integration with RUCKUS management platforms, this transceiver is perfect for deployment in hospitals and clinics.

Retail & Hospitalit

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to meet the unique needs of retail and hospitality environments, where high-speed data transfer and low latency are critical. With its compact form factor and low power consumption, this transceiver is perfect for deployment in a wide range of environments, from retail stores and restaurants to hotels and resorts.

Manufacturing & Warehouse

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is engineered to meet the most stringent security and compliance requirements of manufacturing and warehouse environments, where high-speed data transfer and low latency are critical. With its robust security features and seamless integration with RUCKUS management platforms, this transceiver is perfect for deployment in factories and warehouses.

ADVANCED SECURITY FEATURE

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to meet the most stringent security and compliance requirements, with features such as:

- WPA3: The latest Wi-Fi security standard, providing robust encryption and authentication
- 802.1X authentication: Secure network access with user authentication and authorization
- Role-based access control: Granular access control and permission management
- Advanced threat protection: Real-time monitoring and protection against malware and other threats

MANAGEMENT & CONTROL PLATFORM

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed for seamless integration with RUCKUS management platforms, including:

- SmartZone: Comprehensive network management and control
- RUCKUS One: Cloud-based network management and analytics
- Unleashed: Easy-to-use network management and control

PERFORMANCE METRICS & BENCHMARK

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver has been extensively tested and benchmarked to ensure exceptional performance, with results including:

- High-speed data transfer: Achieve speeds of up to 25.78125 Gbps
- Low latency: Minimize packet delay and ensure seamless communication
- High reliability: Enjoy high availability and reliability, with features such as digital diagnostics and real-time monitoring

INTEGRATION & COMPATIBILITY

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to integrate seamlessly with a wide range of network equipment and platforms, including:

- RUCKUS network switches and routers
- Other network equipment from leading manufacturers
- Cloud-based management platforms and analytics tools

SUPPORT & SERVICE

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is backed by comprehensive support and services, including:

- Professional services: Implementation and consulting services
- Technical support: 24/7 support and troubleshooting
- Training and certification: Educational resources and programs

CERTIFICATIONS & COMPLIANCE

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver has been certified to meet the most stringent regulatory requirements, including:

- FCC: Federal Communications Commission certification
- CE: Conformité Européenne certification
- IC: Industry Canada certification
- Industry standards compliance: Compliance with industry standards and regulations

ORDERING INFORMATION

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is available for ordering through authorized RUCKUS partners and distributors, with options including:

- Base configuration: Standard features and specifications
- Optional accessories: Additional features and capabilities
- Licensing options: Software licensing and subscription options

WARRANTY & SUPPORT OPTION

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is backed by a limited lifetime hardware warranty, with comprehensive support options including:

- Hardware warranty: Detailed warranty terms and conditions
- Software and firmware support: Software support and update policies
- Advanced support services: Premium support options and services

TECHNICAL APPENDIX

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The RUCKUS OT-25G-LR-1310-SM Optical Transceiver is designed to meet the most stringent technical requirements, with features and specifications including:

- Configuration examples: Sample configurations and deployment guides

- Performance test results: Detailed performance benchmarks and test results
- Troubleshooting guide: Common issues and solutions

DATA SHEET

This datasheet provides comprehensive technical information for the RUCKUS OT-25G-LR-1310-SM Optical Transceiver. For the most current specifications and additional technical documentation, please visit ruckusnetworks.com or contact your authorized RUCKUS partner.

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