

# SIMREX Corporation

## DataMover™ Transaction LM Series

On-Line Transaction  
Processing Network  
Master Station

# INTELLIGENT wireless DATA



### TRANSACTIONAL DATA APPLICATIONS

- Lottery Networks
- Automated Teller Machines (ATM)
- Branch Banking
- Water Management
- Back-up Systems
- Gas and Oil SCADA
- Points of Sale (POS)
- Electric Distribution Automation

### System Overview

A SIMREX DataMover Transaction system offers intelligent wireless networking products and network management software to support real time applications such as lottery terminals, ATM machines, POS terminals, water, gas and oil SCADA, etc. The Transaction On-Line Transaction Processing (OLTP) system is a highly efficient wireless implementation that employs intelligent radios at each end of the wireless network. A Transaction point-to-multipoint system is organized in cells. Each cell consists of one LM master station and multiple LR remote radios managed by DataMover NMS (Network Management System) software. Multiple master stations are typically connected through a WAN to one or multiple processing centers.

Transaction integrates into existing customer networks allowing the wireless network to seamlessly coexist with a wired network infrastructure. It provides intelligent network support for real time applications with a data transfer rate of up to 19.2 Kbps.

Intelligent / Wireless / Data

### SIMREX..Global wireless solutions. Transaction Wireless Data

For almost 2 decades, SIMREX Corporation's wireless products have been providing wireless networking solutions with applications in SCADA, telemetry, telecommunications, mobile data and online transaction markets. SIMREX Corporation provides licensed and unlicensed solutions, installed worldwide.

### Product Overview

The DataMover Transaction LM master station utilizes DSP technology to offer a highly efficient radio network with extended range capability to support bursty data applications.

DataMover Transaction LM supports multiple applications and network protocols. When the need for multiple applications arises, the DataMover Transaction LM has five ports in support of five different network protocols. Each Transaction LM can manage up to 64 Transaction LR remote radios. The LM is designed to accept a full range of frequencies to complement the Transaction LR's capabilities, licensed radios (200 MHz to 960 MHz) and unlicensed spread spectrum radios (900 MHz). The Transaction LM supports point-to-multipoint configurations and, when required, coverage can be extended with repeaters.

The Transaction LM is a wireless master station that supports standard network protocols. It integrates into customer specific networks, allowing wireless data to seamlessly exist within the network infrastructure. When a transaction is received by the data port of the LR remote transceiver, it is converted to an efficient radio protocol and only the data portion is transported over the wireless segment and into the master station.

The Transaction LM master station delivers the transaction to the local data center host computer or alternately, sends the transaction across a wide area network (WAN) into a LM-H host interface unit. The LM-H converts the data back into the appropriate protocol and delivers it to the host computer.

The Transaction LM series can be configured with its 5 data ports in support of multiple concurrent industry standard protocols (X.25, IP). It is a seamless solution that allows direct connectivity to a telco switch or cloud without the need for third party equipment. The Transaction LM series improves access time by incorporating spoofing functionality to conserve bandwidth in polled systems and only using the channel when there is data to send.

### Why Consider a DataMover Transaction Solution?

- Carrier-rated reliability that supports mission critical revenue producing applications. The Transaction Series is manufactured under ISO 9001 certification.
- Transaction LM's architecture offers a redundancy option at the master station for increased availability
- DataMover NMS monitors every point on the network. With a Windows-based GUI it offers complete control and updated information to manage the network: alarms, statistics, diagnostic tools and remote control functionality
- Ease of integration – Transaction is compatible with standard WAN transport protocols. Its multiprotocol capability encompasses the most comprehensive suite of protocols
- Efficiency – Transaction operates on a single radio frequency allowing you to double the number of networks running on existing frequency pairs or to cut in half the expense to acquire new frequency pairs. Its multiprotocol capability reduces the need to support parallel networks for different services
- Rapid deployment – reduces time to revenue
- Flexibility to incorporate both licensed and license-free (spread spectrum) radios in the same system

# DataMover™ Transaction LM Master Radio Specifications

## Physical Interface

Serial Ports: 4 serial ports  
DB-25F (RS-232/V.24) or RJ-11 (RS-485)  
Software configurable as DCE/DTE (RS-232) or RS-485 2w HD (RJ-11)  
1,200-38,400 bps  
RS-422/V.35 option (64 kbps-2 Mbps)

Ethernet Port: 1 Ethernet port, RJ-45F (10BaseT DTE)

Local management: 1 serial port, DB-9M (RS-232 DCE)

Protocols: IP/Ethernet (TCP, UDP, ICMP, ARP, RIP)  
X.25  
X.28 Async PAD  
HDLC  
SDLC  
BSC  
Poll Select  
Modbus  
DNP.3  
CCA (Clear Channel Async)  
Other protocols available on request

## Transceiver Options

OPTION	FREQ. RANGE	OPERATION
LM-2	220-240 MHz	licenced
LM-4	330-512 MHz	licenced
LM-9	800-960 MHz	licenced
SM-9	902-928 MHz	unlicenced FHSS

(Consult transceiver specifications for details)

## Front Panel

4 X 20 char LCD display  
12 LED indicators for: Power, Fault, Radio Network, LAN, Redundancy, Test, 4 serial ports, 2 virtual ports

## Mechanical

Case: Steel chassis  
Dimensions: 9 x 48 x 34 cm (H x W x D)  
(3.5 x 19 x 13.5 inches) (2U)  
Weight: 6.8 kg (14.5 lbs)  
Weight w/optional battery: 8.2 kg (18.1 lbs)

## Environmental

Temperature Range: -30°C to +60°C (-22°F to +140°F)  
Front Panel LCD: 0°C to + 50°C (32°F to +122°F)  
Humidity: 95% non-condensing

## Power

Primary Power: 110/220 VAC 50/60 Hz  
±24 VDC  
±48 VDC  
Consumption: 20 Watts nominal  
Optional Battery (AC only): 2 Hour operation

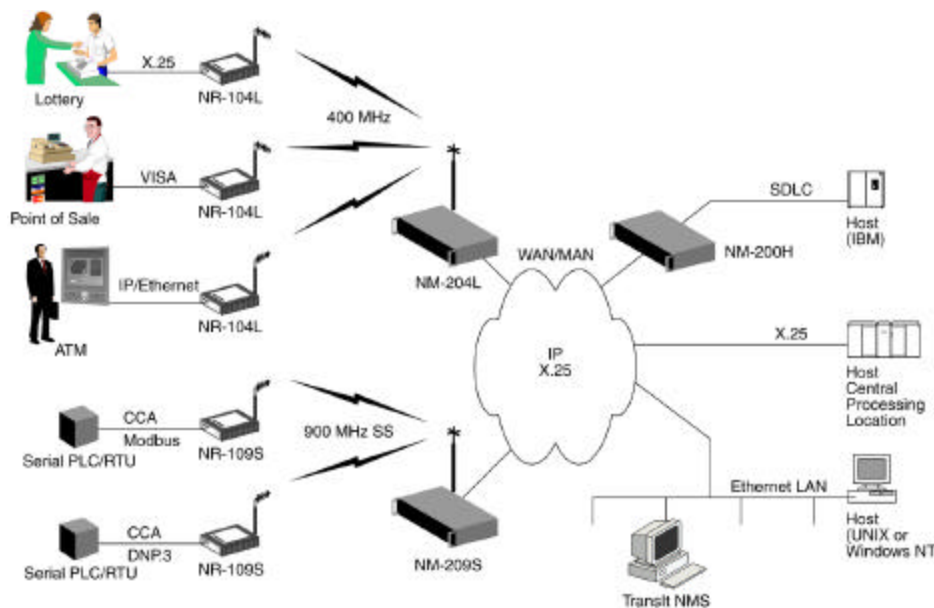
## Network Management

Windows 95, 98 or Windows NT™ compatible system provides configuration, fault and performance management over a TCP/IP or X.25 connection to master stations, and over-the-air access to the remote stations.

## Agency Approvals

FCC part 101 (licensed)  
FCC part 15 (spread spectrum)  
CE Mark  
MPT 1411 (LR-4M @ 4.8 Kbps)  
ETSI (LR-4E @ 4.8 Kbps)

DataMover™ Transaction  
Wireless On-Line Transaction Processing (OLTP) Solution



## DataMover Transaction...Intelligent Wireless Data Networking

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SIMREX DataMover products are manufactured under a quality system certified to ISO 9001. SIMREX reserves the right to make changes to specifications of products described in this data sheet at any time without notice and without obligation to notify any person of such changes.  
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