

SIMREX Corporation

GLB Radio Data Controller

WIRELESS data CONTROL



SIMREX..Global wireless solutions. Unlicensed 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

SIMREX Corporation's GLB Radio Data Controller "RDC" is designed for point to point or point to multipoint networks to handle reliable high speed data up to 19,200 baud. The "RDC" is also designed for Spectrum/Network efficiency to allow the maximum number of subscribers on the network. The "RDC" can be interfaced with most radios to provide superb networking control. The "RDC" is available in a full enclosure (shown) or as an OEM component (boards only) for the best integration configuration.

Features

- Baud Rates: Over the air (1200 to 19,200 bps), serial (1200 to 38,400 bps)
- TCP / IP Compatible
- Interface with "MOST" Radios
- TTL, RS232/422/485 Interfacing
- Robust "Forward Error Correction"
- Ideal for Polling and Time Slotting
- Regeneration for Increased Throughput
- Digipeating (Store & Forward)
- Supports point-to-point and point-to-multipoint, repeater operation with user-configurable addressing
- 2 Addressable Serial Ports
- Customer Programmable (EEPROM)

Applications

- | | |
|---------------------------------------|--|
| • Automatic Vehicle Location (AVL) | |
| • Public Safety: | Police, Fire, Ambulance |
| • Mobile Terminals: | Waste Management, Recycling, Scoreboards |
| • DGPS: | Guidance, Surveying, Railcars, Agriculture |
| • Intelligent Transportation Systems: | Public Transit, Subway, Taxis |

GLB Radio Data Controller Specifications

SYSTEM

Operating temperature range:	-30°C to +60°C
Storage Temperature:	-55°C to +85°C
Warm-up time:	none
Humidity:	0 to 99% RH, non-condensing
Size:	4.485W x 1.425H x 6.577D
Weight:	1 lbs (.4 kg)
Power requirement:	10-15 volts DC, negative ground
Current Drain:	85 Milliamps Typical
Computer Connector:	DB25 Female
Radio Connector:	DB15 Male
LED's:	6
FCC Type Acceptance:	Part 15
Mounting:	Mounting holes, Rack Mountable
Packaging:	Black, Anodized Aluminum, Dust, Water and Corrosion Resistant

CONTROLLER

Serial ports:	Primary & Secondary, TTL, RS232, RS422, RS485
Data rate, serial port:	300-38400
CPU Watchdog timer:	Approximately 1 Second
Transmit limit timer:	Approximately 15 Seconds
Memory:	32K EPROM, 32K RAM, 512 bytes EEPROM
Backup method:	EEPROM
Computer Interface:	RS232 with optional RS 422 or RS 485
Flow Control:	RTS, CTS, or XON & XOFF
Protocol:	CSMA
Optional:	Forward Error Correction

MODEM

Baud rate:	1200-19,200 Baud
Modem Modulation:	FSK, GMSK, Bell 202
CD response:	2 milliseconds

RADIO (DB15) PIN DESCRIPTION

1. Ground
2. Audio to Transmitter
3. Output Bit #1
4. Output Bit #2
5. Output Bit #3
6. Output Bit #4
7. Modem DCD (In or Out)
8. Input Bit #1
9. Input Bit #2
10. Audio from Receiver
11. Transmitter / Key
12. Squelch Input
13. +12 Volts Power Input
14. Remote Command Lockout
15. Reset

COMPUTER (DB25) PIN DESCRIPTION

1. Ground
2. RS232 Data In
3. RS232 Data Out
4. RTS In
5. CTS Out
6. DSR
7. Ground
8. DCD (+5V / MD CD)
9. Unused
10. Unused
11. Unused
12. Modem (MD CD)
13. Secondary CTS Out
14. Secondary Data In
15. Modem TX Clock
16. Secondary Data Out
17. Modem RX Clock
18. Unused
19. Secondary RTS
20. DTR
21. Unused
22. RI Grounded
23. Unused
24. Unused
25. Unused

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