8510

User Manual

Warranty

All products manufactured by SuperLogics are warranted against defective materials for a period of one year from the date of delivery to the original purchaser.

Disclaimer

SuperLogics assumes no liability for damages consequent to the use of this product. SuperLogics reserves the right to change this manual at any time without notice. The information furnished by SuperLogics is believed to be accurate and reliable. However, no responsibility is assumed by SuperLogics for its use, nor for any infringement of patents or other rights of third parties resulting from its use.

Copyright

Copyright 1999 by SuperLogics All rights reserved.

Trademarks

Trademarks and tradenames used herein are the property of their respective owners.

License

This software may be used, modified or backed-up on a single machine. The software, or any copy of it, may not be reproduced, transferred, or distributed, in whole or in part.

Chapter 1 Introduction

1.1	Introduction	.3
-----	--------------	----

Chapter 2 8510 Specifications

2.1	Pin Assignments	.4
2.2	Specifications	.4
2.3	Block Diagram	.5
2.4	Basic Wire Connections	.5

Introduction

The 8000 Series of modules is comprised of analog and digital I/O modules designed for a wide variety of data acquisition and signal conditioning functions. These modules are designed for an RS-485 communication network, and require an RS-485 to RS-232 converter in order to be accessed through a standard PC serial port. The 8520/8520R module performs this function. Each 8520/R converter module can accommodate 256 modules over 4000 feet. The 8510 repeater module is used to extend the RS-485 network an additional 4000 feet per repeater module, or to add an additional 256 modules to the network. The 8510 module can also be used to segment a very long 8000 network into smaller isolated portions to protect the system from transient energy surges.

Like the 8520 module, the 8510 contains a unique Self-Tuner ASIC which permits it to process signals from multiple modules operating at different baud rates and with different data formats.

Features:

Input: RS-485

Output: RS-485

Speed: "Self Tuner" inside, auto switching baud rate, 300 to 115.2 kbps.

Isolation Voltage: 3000 VDC

2.1 Pin Assignment



2.2 Specifications

8510 : RS-485 Repeater

Input: two-wire RS-485, (D+,D-) Output: two-wire RS-485, (D+,D-) Speed: Internal "Self Tuner,", automatic switching baud rate, from 300 to 115,200 BPS Isolation voltage: 3000V Connector: plug-in screw terminal block Power Requirements: +10V to +30VDC Power Consumption: 2.2W(Max)

2.3 Block Diagram



Figure 2.3.1 8510 block diagram

2.4 Basic Wire Connection



Figure 2.4.1 8510 wire configuration