DEVICEMASTER®
FreeWire

HIGHLIGHTS

- Industry's most advanced wireless security, supporting WPA, WPA2, WEP and PSK or 802.11x authentication with TTLS, TLS, LEAP, PEAP, and FAST

- 802.11 b/g wireless communications with option of direct 10/100 Ethernet connection

- Enterprise level security features including access control lists, protocol and application enable/disable control, read and write configuration passwords, and SNMP community name configuration

- Widest variety of management options, including HTTP, Telnet, Windows-based utility, console port, and SNMP

- Rugged, IP40-rated steel housing with side flange mounting supports a wide variety of installation options

- Windows COM port redirector software ensures seamless integration with applications by mapping remote serial ports to local PC COM ports

Part Number
31300-7

- Scanner
- Printer
- DNC Machine
- Weigh Scale
- Sensors

DeviceMaster FreeWire   Access Point   Server

Flexible, Rugged, Compatible Wireless Device Server Features Industry's Most Advanced Security

DeviceMaster FreeWire leverages the industry's most advanced security to enable communication to remote serial devices via 802.11b/g wireless or direct wired 10/100 Ethernet technologies. The latest addition to Comtrol's DeviceMaster family of serial device servers, FreeWire is ideal for situations where LANs are not feasible, where wiring is difficult or where devices are moved periodically. FreeWire's flexible connection options provide the ultimate freedom of choice.

Like other DeviceMaster products, FreeWire is packages in a rugged, galvanized, IP40-rated steel enclosure, facilitating installation in a wide variety of environments. And FreeWire is fast and easy to install and manage: It includes an extensive management application that allows users to set up, configure, manage and maintain multiple device servers quickly and simultaneously. FreeWire also includes COM port redirector software for mapping local COM ports to the remote FreeWire serial connection and an integrated web server for remote configuration from any networked PC, Telnet and serial console administration.

All of this from Comtrol, one of the oldest, most respected manufacturers of device connectivity servers in the industry.

COMTROL®

COMTROL®

HARDWARE

Bus Interface Specification

Enclosure	Metal IP40 Rating
Installation Method	Panel Mounting
LED Indicators	Power, 10Mbps, 100Mbps
Dimensions	
4.95" x 0.95" x 2.96"	
Product Weight	.76 lbs

ELECTRICAL SPECIFICATIONS

Device

DC Input Voltage	4.75 - 5.25 VDC
Current Consumption	
+5VDC	600 mA
Power Consumption (max)	3 W

Comtrol External Power Supply

Output Voltage	5VDC
Output Current	
+5VDC	2.5 A
Line Frequency	50/60 Hz
Line Voltage	100-240 VAC

ESD Surge Protection
Provides minimum of 15KV protection for all serial lines

ENVIRONMENTAL SPECIFICATIONS

Air Temperature

System on	0° to 50° C
System off	-20° to 70° C
Operating Humidity	
Non-condensing	10% to 90%
Altitude	0 to 10,000 Feet
Heat Output	10.24 BTU/Hr

SERIAL COMMUNICATIONS

Connector Type	DB9 Male
Supported Standards	RS-232
Baud Rates	300 to 921 kbps
Receive Buffer	1,024 Bytes
Transmit Buffer	4,096 Bytes
Device Driver Data Control	
Data Bits	7 or 8
Parity	Odd, even or none
Stop Bits	1 or 2
Flow Control	Hardware or Software

NETWORK SPECIFICATIONS

Ethernet Interface	10/100 Base-T

WLAN/Ethernet Protocols
802.11g, ARP, TCP, Telnet, ICMP, SNMP, DHCP, BOOTP, Auto IP, HTTP, SMTP, TFTP, SLP, DNS, Dynamic DNS, RFC2217, WLAN roaming

Wireless Security
WPA and WPA2 (personal and enterprise modes), PAP, MS-CHAPv2, 802.1x EAP with TLS/TTLS/LEAP/PEAP/FAST, WEP

Data rates with automatic fallback
54MBPS, 48MBPS, 36MBPS, 24MBPS, 18MBPS, 12MBPS,   11MBPS, 9MBPS, 6MBPS, 5.5MBPS, 2MBPS, or 1MBPS

Frequency Range	2.4 GHZ ISM Band
Operating Range	100 m
Transmitter Output	
802.11g mode	
Channel 2-10, 12, 13	15 dBm
Channel 11	14 dBm
Channel 1	12 dBm
802.11b mode	
Channel 14	14 dBm

Reciever Sensitivity (PER <10%)

11g:	
54Mbps	-68 dB Min
48Mbps	-68 dB Min
36Mbps	-75 dB Min
24Mbps	-79 dB Min
18Mbps	-82 dB Min
12Mbps	-84 dB Min
9Mbps	-87 dB Min
6Mbps	-88 dB Min
11b:	
11Mbps	-82 dB Min
5.5Mbps	-84 dB Min
2Mbps	-86 dB Min
1Mbps	-88 dB Min

External Antenna Type
Detachable RP-SMA connector with dipole swivel 2.0dB gain

Operating Mode
Infrastructure, ad-hoc

REGULATORY STANDARDS

Emissions
European Standard EN55022
 EN 301 489-1
 EN 301 489-17
 EN 300 328
FCC Part 15 Subpart B and Subpart C: Class B limit AS/NZS 4268
 CISPR 22 Class B limit

Immunity
EN55024:
IEC 1000-4-2/EN61000-4-2: ESD
IEC 1000-4-3/EN61000-4-3: RF
IEC 1000-4-4/EN61000-4-4: Fast Transient
IEC 1000-4-5/EN61000-4-5: Surge
IEC 1000-4-6/EN61000-4-6: Conducted Disturbance
IEC 1000-4-11/EN61000-4-11: Dips and Voltage Variations

Safety
IEC 60950/EN60950
 CSA C22.2 No. 60950/UL 60950 Third Edition

Other
European Standard: 2002/95/EC Directive (RoHS)

REGULATORY APPROVALS

RoHS CE FC c UL us C

MANAGEMENT AND UTILITIES

Serial Port Emulator Software
Management Utility
Web Browser Interface
Console Accessible Via Serial Port or TELNET
Simple Network Management Protocol (SNMP)
 MIB I and II; IP
Firmware Downloads Via TCP/IP (master mode tftp, slave mode TFTP, or BOOTP)
On-line HELP

EXPORT INFORMATION

Packaged Shipping Weight	2.13 lbs
Packaged Dimensions	
10.25" x 7.5" x 3.375"	
Country of Origin	Japan
ECCN	5A992
Schedule B Number	8473.30.1180
FCC License Number	N6C-SX10WG

FEATURES

SNMP Support
RoHS Compliant
2-Year Warranty

APPLICATIONS

• Serial printers

• Medical devices

• Material handling

• Weigh scales

• Security access and control

• Point of sale

• LED signs

• Industrial automation

• Building automation

• Nearly any M2M or SCADA application utilizing serial connectivity

ORDERING INFORMATION

31300-7 DeviceMaster FreeWire 1-Port

PRODUCT SUPPORT & SERVICE INFORMATION

Warranty Information
Comtrol offers a 30-day satisfaction guarantee and 5-year limited warranty.

Sales Support
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