



Connectware™

Configuring Digi One™ TS or Digi TS H for use with Autoscope Vehicle Detection System

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Overview

This configuration note describes Digi One TS with Autoscope Vehicle Detection System devices. The Autoscope technology provides traffic managers the means to reduce roadway congestion and improve roadway planning. It provides real-time detection information to improve urban traffic and provide highway speed data for traffic control centers and Internet information systems.

The Digi One TS device server is designed for universal, high-performance serial-to-Ethernet connectivity. It is ideal for RS-232/422/485 applications where remote device management and monitoring are required.

- > Easily network-enable virtually any serial device
- > Switch selectable RS-232/422/485 for simple interfacing to any type of serial device
- > Digi's patented RealPort® with encryption for COM or TTY port control and management
- > Management and diagnostic utility for simple and efficient device monitoring and troubleshooting
- > Secure communication via SSH v2
- > Port buffering for data capture
- > Easy configuration through web interface (HTTP/HTTPS)
- > Industry leading low latency

The Digi TS H family of device servers is designed specifically for traffic management, pipelines or any remote application requiring a hardened serial-to-Ethernet solution that can withstand extreme temperatures (-35°C to +70°C).

- > Robust, hardened model with extended temperature range of -35° C to +70° C
- > RS-232/422/485 switch selectable on Port 1, RS-232 on all other ports
- > Patented Digi RealPort® technology for COM or TTY port control and management
- > Data security via SSH v2 and SSL/TLS
- > Port buffering for data capture
- > Easy configuration through web interface (HTTP)
- > Industry leading low latency
- > 9-30VDC power with bare-wire "pigtail" for direct connection

Configuration Instructions

Part I. Configuring the Digi One TS:

Use the discover utility to find the unit, and if necessary, assign it an IP address, following the quick start guide.

Click on Configure, to bring up the WebUI.

If you are using the Wizard, just choose TCP sockets, and set the port speed to 115.2 and the flow control to none.

If you are using the discover utility, or wish to configure the unit via the WebUI (or reconfigure a unit in the field) follow the following steps.

Browse to the unit's IP address: <http://192.168.1.1> (or whatever it is)

Username: root

Default password: dbps



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Serial Port Configuration

Port	Description	Profile	Serial Configuration	Action
Port 1	None	<Unassigned>	9600 8N1	Copy...
Port 2	None	<Unassigned>	9600 8N1	Copy...
Port 3	None	<Unassigned>	9600 8N1	Copy...
Port 4	None	<Unassigned>	9600 8N1	Copy...

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Click on Configuration->Serial Ports, "Port 1"



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Select Port Profile...

You have currently not assigned a profile to this serial port, so we are displaying those items that are relevant to the current configuration.

Select the profile below that best matches your configuration.

- RealPort**
The RealPort Profile allows you to map a COM port to a serial port.
- Console Management**
The Console Management Profile allows you to manage the serial port connection. [More...](#)
- TCP Sockets**
The TCP Sockets Profile allows a serial device to be accessed over a network connection.

Click on "TCP Sockets", scroll down, and click "Apply"

Click on Basic Serial Settings, set the port for 115.2 and no flow control, then click apply.

Repeat as necessary or copy the configuration, by choosing serial ports -- and the copy button to the right of the "Port 1" settings. Click the checkboxes that you wish to configure in the same manner as port 1.



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Copy Port Settings...

Note: The following port settings will not be copied: Baud Rate, Parity, Stop Bits, and Socket ID.


Copy Port 1 settings to port:

2 3 4

Apply

Cancel

Click Apply. The ports are now configured.



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Serial Port Configuration - Port 1

- ▶ Port Profile
- ▼ **Basic Serial Settings**

Description:

Baud Rate:

Data Bits:

Parity:

Stop Bits:

Flow Control:

- ▶ Advanced Serial Settings

Part II - Basic configuration for using Digi One TS products with Autoscope software

The appropriate socket numbers are 2101, 2102, 2103, 2104...2116
These are raw TCP sockets, one per port on the Digi One TS equipment

****Optional for High Speed/Advanced Operation:**

To configure the autoscope to run at 230K, first configure it for 115.2, learn the Autoscope and then change the baud rate on the Autoscope through the Autoscope software. Once the Autoscope controller has rebooted, then go to the Digi WebUI and change the port speed to 230K on the serial port.

Add New TCP/IP Socket Channel [?] [X]

Communication | Clock Synchronization

Description:
TCP/IP Socket 3

Network Address (on the Autoscope network):
192 . 168 . 1 . 254

Socket IP Address:
192 . 168 . 1 . 25
IP Address and Port Number of remote device through which Autoscope messages are passed.

Socket Port Number:
2101

Minimum Port Timeout (milliseconds):
5000

Use this value as the default Minimum Port Timeout for TCP/IP Socket Channels

Next > Cancel

Technical Assistance

Digi International Support web site <http://www.digi.com/support/index.jsp>
Online Support Request <http://www.digi.com/support/eservice/eservicelogin.jsp>

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