gridconnect

TTL-ETH

TTL Serial to Ethernet Adapter

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Disclaimer and Revisions

Operation of this equipment in a residential area is likely to cause interference in which case the user, at his or her own expense, will be required to take whatever measures may be required to correct the interference.

> ***Attention:*** *This product has been designed to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with this guide, may cause harmful interference to radio communications.*

Changes or modifications to this device not explicitly approved by Grid Connect will void the user's authority to operate this device.

The information in this guide may change without notice. The manufacturer assumes no responsibility for any errors that may appear in this guide.

Date	Rev.	Author	Comments
02/10/06	A	GR	Preliminary Release
12/20/06	B	GR	R2 is always installed.
03/28/11	C	GR	Add 9-24VDC

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1. Overview

The TTL-ETH connects TTL level serial devices to Ethernet networks using the IP protocol family. The TTL-ETH belongs to the NET232 family of device servers and is designed to interface to TTL level serial devices.

This manual covers the differences between the standard NET232 device server and the TTL-ETH device server. The basic difference is the NET232 has an RS232 serial interface and the TTL-ETH has a TTL serial interface. For additional information, see the NET232 User Manual and other documents supplied on the software CD.

2. Introduction

2.1 Serial TTL Interface

The table below lists the TTL signals for the TTL-ETH. The TTL interface is a 9-pin Male D-style connector. In this configuration, the unit is a DTE device.

Table 1 - TTL Signals

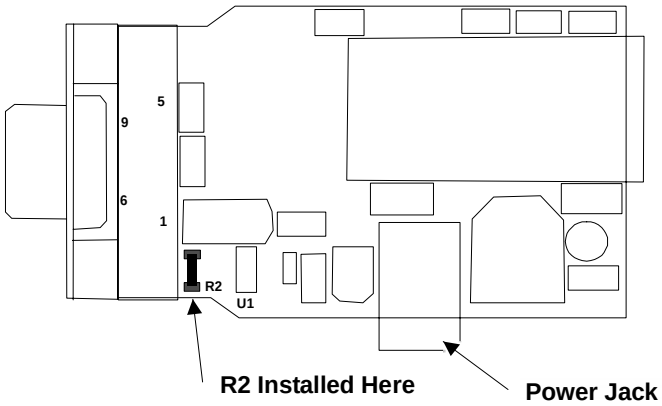
NET232-TTL Signal	Direction	DTE DB-9 Male Pin #
Data Out (TXD)	Out	4
Data In (RXD)	In	5
Ground		2
CTS To CP0 or CP1	Out	9
RTS To CP2	In	3
Power 9-24VDC		1 *

Note: RTS and CTS control lines are not enabled at the factory. See Port Properties and Flow in the NET232 User Manual. You must also configure the OEM Configurable Pins (CP0, CP1, CP2) as described in the Device Installer manual.

Power is supplied to the TTL-ETH through an external power source connected to the power jack on the side of the unit. Power can also be supplied through Pin 1 on the DB-9 Male connector. Power supply should be in the 9-24VDC range.

CAUTION: Power can be supplied through the DB-9 connector Pin 1 through the resistor R2. The R2 resistor is installed at the factory. If you connect an external power source to the side-mounted jack, power will be fed back through R2 to the DB-9 connector Pin-1. To remove R2, open the case and cut or unsolder the component.

These units can be supplied without the power jack on the side of the unit. This option is available in OEM quantities only. Contact the Grid Connect Sales Department for pricing and delivery.



Grid Connect can supply you with a RS-232 to TTL adapter so you can use this device with standard RS-232 signals. The adapter can also be used to configure the TTL-ETH with a serial port from your laptop or PC.