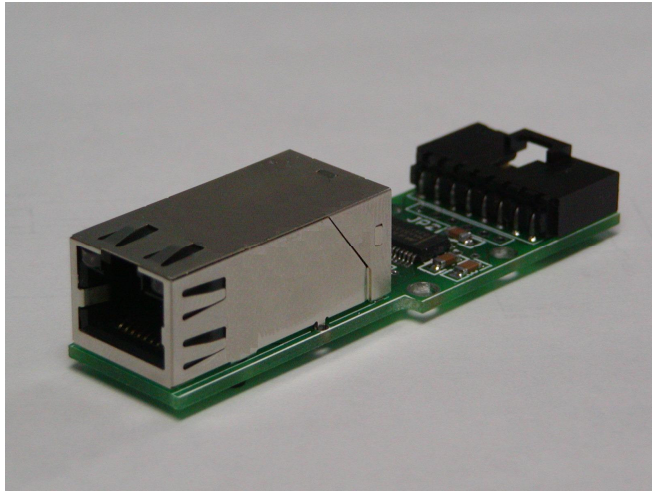




## BBG-S2ENET

## Serial to Ethernet Adapter



### Description

The BBG-S2ENET Serial to Ethernet Adapter (S2ENET) is a compact integrated solution to enable network connection to any device with a standard serial interface. The S2ENET allows OEMs to add Ethernet connectivity to existing products by simply adding a small circuit card.

The S2ENET also offers three programmable I/O pins allowing input, output or control of digital circuitry.

### Features

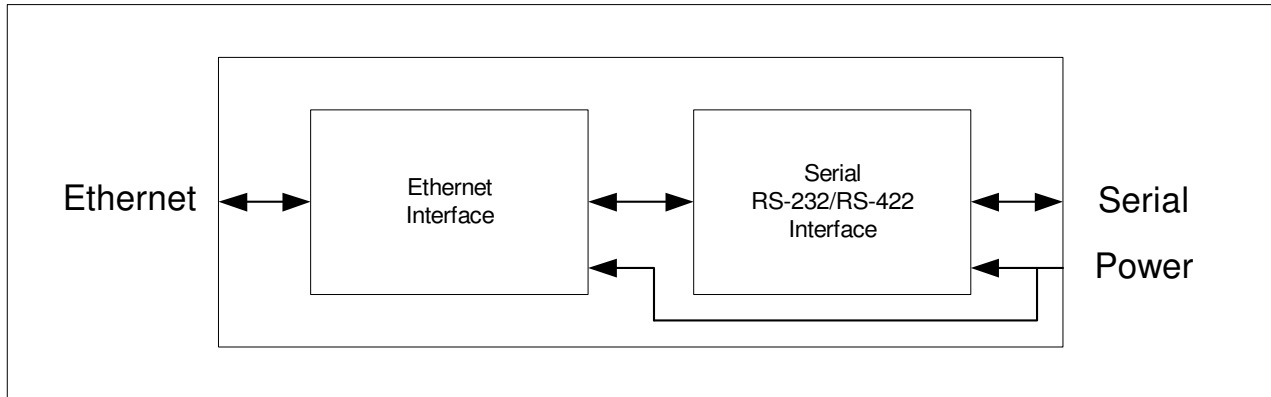
- RS-232 or RS-422 compatible
- 10/100BASE-T Ethernet Auto-Sensing
- Compact Size
- 128 bit AES U. S. Gov't approved Rijndael encryption (Optional)
- Onboard flash memory for storage of web pages or maintenance information
- Extended temperature range (-40/+85°C)

### Applications

- Ethernet to Serial Converter
- Serial to Ethernet Converter
- Sensor Interfaces
- Network Interfaces
- Many Others



## Chart



## Overview

The BBG-S2ENET operates on 3.3Vdc - 5Vdc power to convert between serial RS-232 or RS-422 interfaces and Ethernet interfaces. To allow connection to a local network or the Internet, the S2ENET converter integrates a fully developed TCP/IP network stack and OS. The BBG-S2ENET also includes an embedded web server that can be used to remotely configure, monitor, or troubleshoot devices. Onboard flash memory allows storage of configuration, operational, maintenance, and calibration data that can be displayed on any web browser.



**Technical Specifications**

<b>Parameter</b>	<b>Value</b>	<b>Units</b>
<b>Power Input</b>	3.3 - 5	Volts DC
	.25	Amps
<b>Temperature Range</b>		
Operating	-25 to +85	°C
Storage	-65 to +125	°C
<b>Inputs/Outputs</b>		
Ethernet	10BASE-T or 100BASE-TX (ARP, UDP, TCP, ICMP, Telnet, TFTP, AutoIP, DHCP, HTTP, and SNMP)	N/A
Serial	RS-232 or RS-422	N/A
Digital	3 General Purpose I/O Pins	N/A
<b>Security</b>	Password Protection, locking features, optional Rijndael 128 bit encryption	N/A
<b>Dimensions</b>	0.9 x 2.8 x 0.6	In
	2.3 x 7.1 x 1.5	Cm



**INPUTS/OUTPUTS**

Inputs and outputs are available on standard connectors as listed below:

**Ethernet Interface**

I/O CONNECTOR TYPE: RJ-45 SOCKET

CONNECTOR MATE: RJ-45 PLUG

PIN NO	SIGNAL	PIN NO	SIGNAL
1	TX+ (OUTPUT)	6	RX- (INPUT)
2	TX- (OUTPUT)	7	Terminated
3	RX+ (INPUT)	8	Terminated
4	Terminated	SHIELD	Chassis Gnd
5	Terminated		

**LED Status Indicators**

The BBG-S2ENET contains two Bi-color LED indicators for display of Link status information as follows:

LEFT LED	RIGHT LED	MEANING
Off	Off	No Link
Off	Solid Amber	100BASE-T Half Duplex Link
Off	Blinking Amber	100BASE-T Half Duplex Link; Activity
Off	Solid Green	100BASE-T Full Duplex Link
Off	Blinking Green	100BASE-T Full Duplex Link; Activity
Solid Amber	Off	10BASE-T Half Duplex Link
Blinking Amber	Off	10BASE-T Half Duplex Link; Activity
Solid Green	Off	10BASE-T Full Duplex Link
Blinking Green	Off	10BASE-T Full Duplex Link; Activity

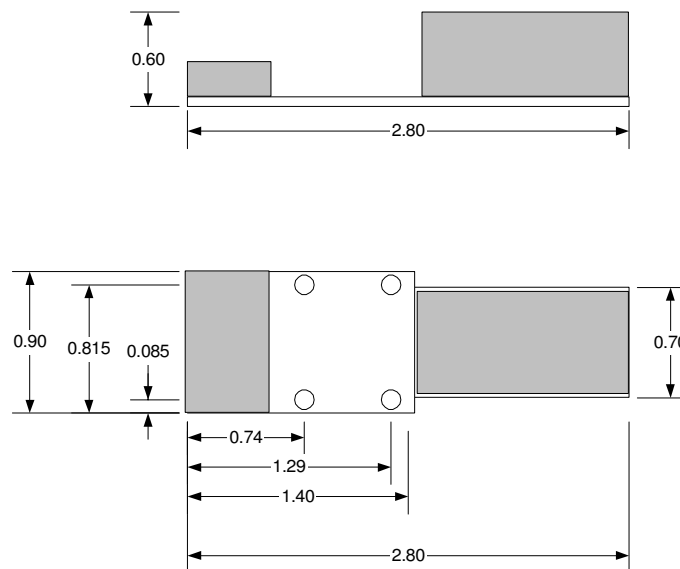


**Serial Interface**

I/O CONNECTOR TYPE: Molex 70553-0007

CONNECTOR MATE: Molex 50-57-9408

PIN NO	SIGNAL	PIN NO	SIGNAL
1	+3.3/+5Vdc	5	+3.3/+5Vdc Return (GND)
2	+3.3/+5Vdc Return (GND)	6	CTS (OUTPUT)
3	RXD (INPUT)	7	DCD (OUTPUT)
4	TXD (OUTPUT)	8	DTR/RTS (INPUT)

**Mechanical Information****NOTES:**

1. Dimensions are in inches.

