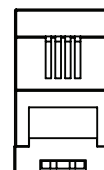
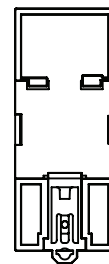
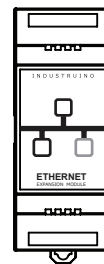
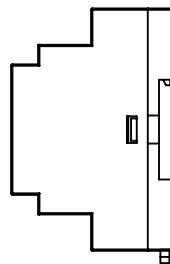
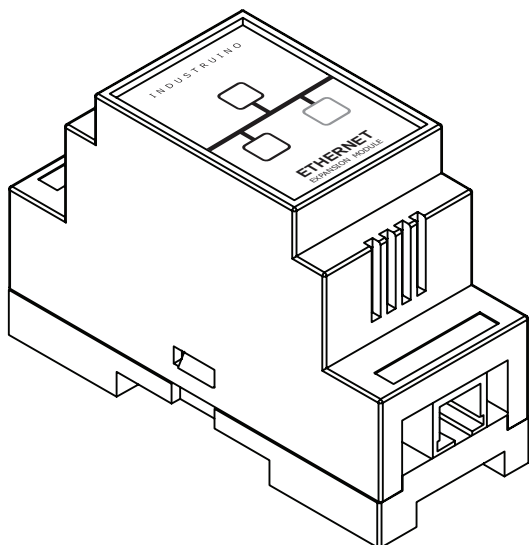
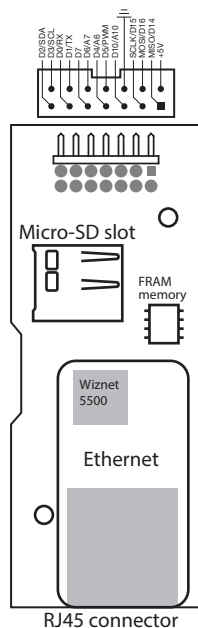




Ethernet Expansion Module Datasheet



Block Diagram



Notes

The Industruino Ethernet Expansion Module connects to Industruino PROTO or Industruino IND.I/O to add Ethernet connectivity and memory flexibility to your installation.

CAUTION:

*Always power down the Industruino controller before connecting or disconnecting the Ethernet Expansion Module via the 14 pin IDC connector.

*Always power down the Industruino controller before inserting or removing a MicroSD card.

*Open the top enclosure cover in order to access the MicroSD card slot.

*When accessing the MicroSD card slot, avoid touching nearby components to avoid ESD damage.

<https://industruino.com/support>

Installation	
Mounting type	35 mm DIN rail mountable
Mounting width	2 spacing units wide
Supply voltage	
Standard input voltage	5 VDC
Permissible range, lower limit (DC)	4.5 VDC
Permissible range, upper limit (DC)	5.5 VDC
Supply current	300mA
Protection of supply	transient protected and filtered
Interface port	
Compatibility	links with Industruino PROTO, IND.I/O
Physical connector	14pin male IDC
Supply level	5V
Signal type	TTL
Signal lines	SPI, i2c, UART, 5 GPIO's
Interface port protection	ESD, transients
Ethernet interface	
Physical connector	RJ-45
Supported speed	10BaseT/ 100BaseTX Ethernet
Protocols supported	TCP, UDP, ICMP, IPv4, Modbus TCP
Interface type	SPI
Comms frequency	4 MHz
Control signals	SPI, CS, IRQ, RST
Internal LED Indicators	SPI, Duplex
External LED Indicators	Power, Link, Activity
Flash card memory	
Slot type	micro SD
Supported types	microSD, microSDHC
Supported capacity	32GB Max
Supported formatting	FAT16, FAT32
Interface type	SPI
Control signals	SPI, CS
Comms frequency	4 MHz
Non-volatile memory	
Memory type	Ferroelectric Random Access Memory (FRAM)
Capacity	64 Kbit
Interface type	SPI
Control signals	SPI, CS
Comms frequency	4 MHz
Environmental	
Protection class	IP20
Ambient operating temperature	0 - 55 °C
Dimensions	
Width	35.75 mm
Height	87 mm
Depth	58 mm
Weight	90 g