innon
BETTER ENGINEERING

Product Overview

Thank you for purchasing a Link IO system. Innon has created the Link IO system in collaboration with CAREL S.p.A., combining high quality and a 5-year warranty with functionality and flexibility.

The Link IO is a distributed I/O system compatible with any Modbus or BACnet controller. The system contains one main unit and up to 10 expansion units.

This Link IO main unit has the following Product Codes: **LNK-IO20-IP-MOD, LNK-IO20-IP-BAC, LNK-IO20-RS-MOD, LNK-IO20-RS-BAC**.

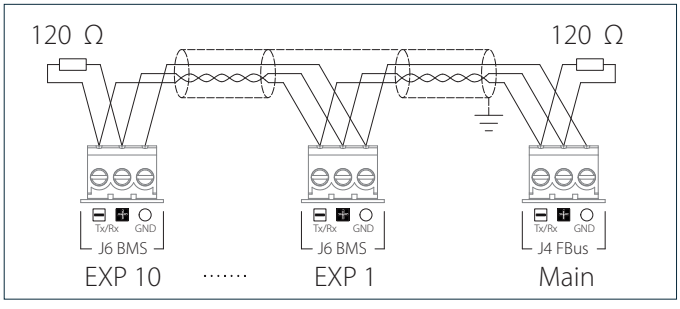
This Link IO main unit comes with either IP or R485 connection. This main unit comes with either Modbus or both Modbus, and BACnet protocols enabled.

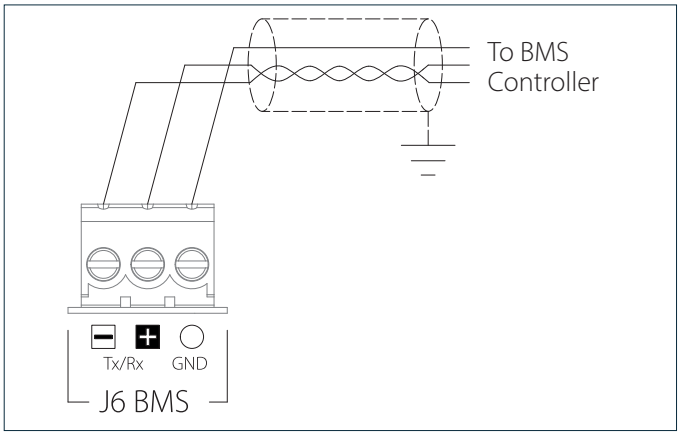
This main unit has 20 I/O made of 10 Universal Channels and 6 Digital Outputs, 2 Digital Inputs and 2 Analog Outputs. The 10 Universal Channels can be set up to be either Inputs or Outputs of various types.

Please go to **link.innon.com** to configure your Link IO system. Once you download the configuration file, you will need to upload it to the main unit only. The expansion units are automatically configured once you connect them to the main unit.

Wiring

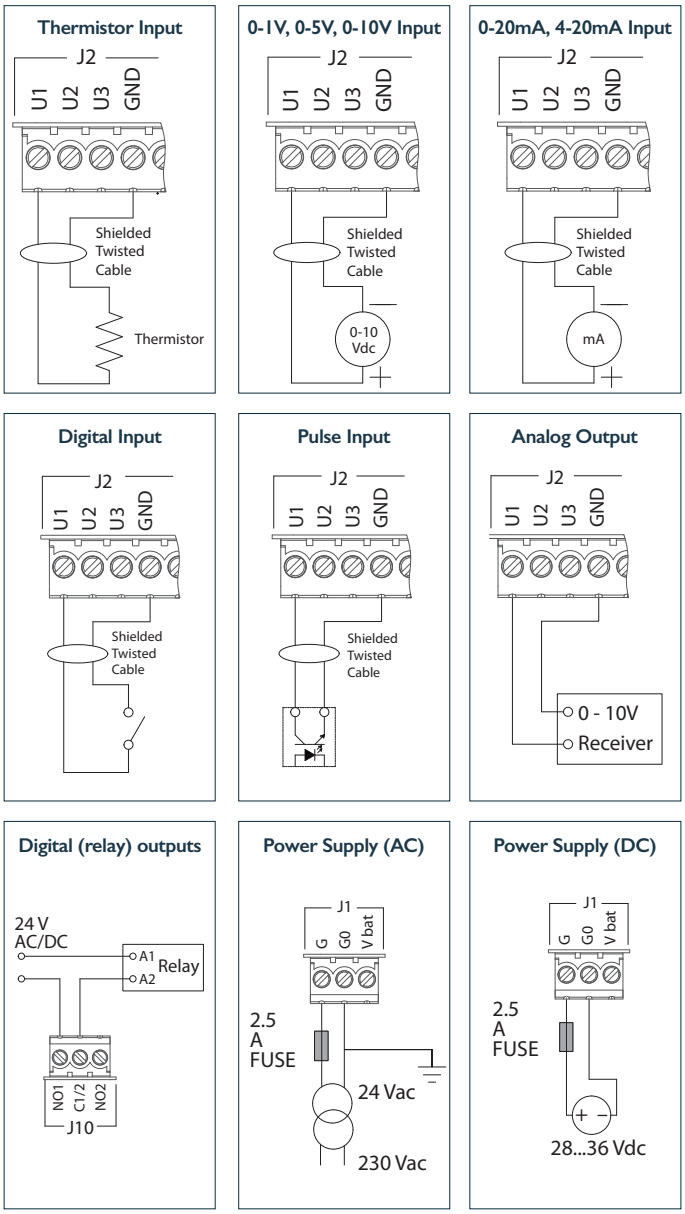
RS485 networks





Wiring

Universal channels (check the manual for limitations on Universal Channels I/O configuration)

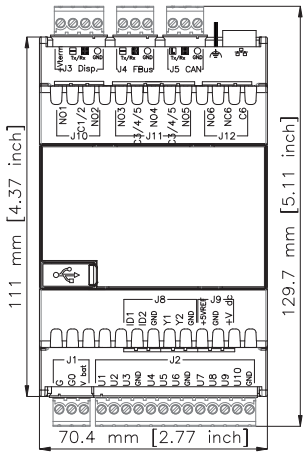


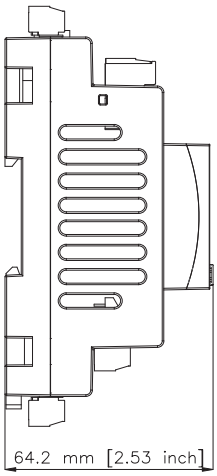
For support go to www.innon.com/support
To setup your Link IO please visit: link.innon.com
E: support@innon.co.uk **T:** +44 (0) 20 3953 4100

Technical Specification

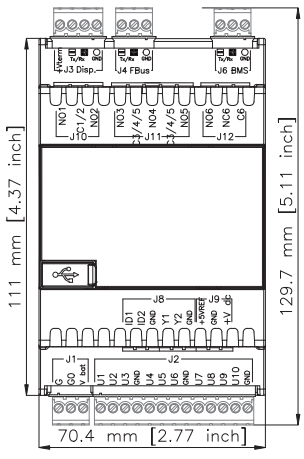
Power supply	24 Vac +10%/-15% 50/60 Hz, 28 to 36 Vdc +10% to -15%, consumption 30 VA / 12W
+Vdc	Voltage output: 12 Vdc +8%/-8%, max current: 50 mA, protected against short circuits
+5Vref	Voltage output: 5 Vdc +3%/-3%, max current: 50 mA, protected against short circuits
Digital Outputs	Output 1 to 5 Relay max 5 A, 250Vac only with NO contacts NO EN 60730-1: 2(1) A (100,000 cycles); UL60730: 5 A resistive, 1FLA, 6LRA, 250 Vac, C300 pilot duty, 30,000 cycles
	Output 6 Relay max 1 A, 250Vac with NO/NC contacts NO EN 60730-1: 1(1) A (100,000 cycles); UL 60730-1: 1 A resistive, 1 A FLA, 6 A LRA, 250 Vac, D300 pilot duty, 30,000 cycles
Universal Inputs/Outputs	10x selectable input/output, precision of analogue input reading: ± 0.3% of full scale, precision of analogue output signal: ± 2% of full scale, analogue/digital conversion: 14-bit, maximum current output 2 mA, maximum connection cable length: less than 10 m
	Passive Inputs NTC 10K3A1, NTC 10K4A1, Carel NTC 10K, PT1000, PT500, PT100 (3 wires), PTC_R, Carel NTC 0-150, Carel -50T90, Carel -10T170
	Active Inputs 0-1 V, 0-10 V, 0-5 V, 0-20 mA, 4-20 mA
	Digital Inputs Volt free contact
	Digital Pulse Counter (up to 2KHz), digital Frequency Measure (up to 2KHz, res +-1Hz)
	Analogue Outputs 0-10 V, PWM 3.3 V 100Hz, PWM 3.3 V 2KHz
Interface to BMS	Connector J6 (BMS), RS485, Modbus RTU or BACnet MSTP, up to 128 devices on the bus, not opto-isolated
	Ethernet, Modbus TCP/IP or BACnet IP
Interface to expansions	Connector J4 (Field Bus), RS485, not opto-isolated
Baud-rate	Range from 2400 to 115200 bps
Baud-rate expansions	Fixed 38400 bps
Ingress Protection Rating	IP40 - for indoor installation
Temperature and humidity	Operating: -20°C to +60°C (-4°F to 140°F), max 90% RH (without condensation)
	Storage: -30°C to +70°C (-22°F to 158°F), max 90% RH (without condensation)
Connectors	Separable, max 2.5 mm^2 (18 – 12 AWG)
Mounting	DIN rail mounting (DIN EN 50022 norm)
Housing Material	Plastic, self-extinguishing PC/ABS
PTI of insulating materials	PCB: PTI 250 V; insulating material: PTI 175
Cable cross-section	min 0.5 mm^2 - max 2.5 mm^2

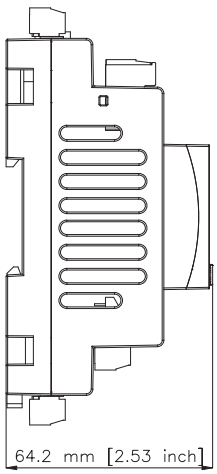
LNK-IO20-IP: Technical Drawing





LNK-IO20-RS: Technical Drawing





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