

ZQxULC-LT

Universal Lighting Controller

ZQxULC-LT gestisce tutti i tipi di apparecchi di illuminazione, controller e sensori grazie ai suoi I/O ed alle interfacce cablate (DALI, RS485) e wireless (868MHz, 2.4GHz). ZQxULC-LT può agire come gateway Ethernet utilizzando il protocollo Modbus TCP.

ZQxULC-LT manages all types of lighting luminaires, controllers and sensors thanks to its I/O and to wired (DALI, RS485) and wireless (868MHz, 2.4GHz) interfaces. ZQxULC-LT can acts as a Ethernet gateway using Modbus TCP protocol.



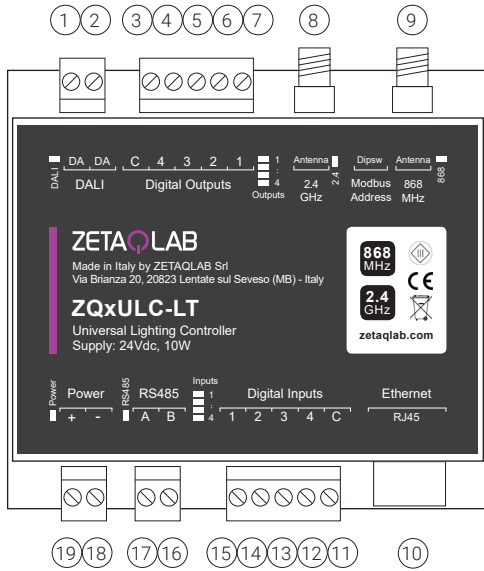
Modelli | Models

Model	Code	Description
ZQxULC-LT	ZQ15-01R0	Universal lighting controller wireless (2.4GHz, 868 MHz 16 dBm) and wired (DALI, RS485).

Specifiche tecniche | Technical specifications

Input power	24 Vdc - 10W
Radio	868 MHz: Proprietary protocol (Mesh Network, LBT and AFA supported) ZQxULC-LT: 869.4/869.6 MHz, +16 dBm (Long Range) 2.4 GHz: Zigbee / Bluetooth 5 SIG / Bluetooth LE, +10 dBm
868 MHz wireless transmission range	500 m line-of-sight, extension by Mesh Network
2.4GHz wireless transmission range	Zigbee: 30 m. Bluetooth 5 SIG: 30 m. Bluetooth LE: 10 m. All distance are intended line-of-sight.
Antenna	2 x SMA female for external antenna (868MHz and 2.4GHz)
Ethernet	1 x Ethernet 10/100 BaseT, Default IP: 192.168.100.110, RJ45 plug Protocols: TCP/IP (TCP, UDP), HTTP, Modbus TCP
DALI Interfaces	1 x Digital Addressable Lighting Interface (powered 250 mA)
Serial Interfaces	1 x Serial RS485 (Modbus RTU). Dip switch for Modbus Addressing (Slave Mode)
Digital Inputs	4 x Digital Inputs (Dry Contact)
Digital Outputs	4 x Digital optoisolated Outputs (max 0,5A @ 125VAC, 1A @ 30VDC)
Diagnostic LED	Power, RS485 Act, I/O Act, Ethernet Act/Link, 868 Act, 2.4 Act, DALI Act
Connector block	Screw terminals, wire cross section 0,5-2,5 mm ² (max AWG13). Ethernet: 1 x RJ45. SMA female connector for external antenna
Operating Environment	Ambient temperature (ta) -10°C to +65°C Relative humidity 10% to 90%, Max. housing temp. (tc) 70°C, Storage -30°C to +80°C
Housing	Plastic DIN rail 5M, IP20
Dimensions	88 x 90 x 32 mm
Weight	140 g
Standards & Legislation	Approvals RED 2014/53/EU, EMC directive 2014/30/EU, LV directive 2014/35/EC, RoHS II directive 2011/65/EU, 2015/863/EU, WEEE directive 2012/19/EU Safety EN 61347-1: 2015; EN61347-2-11: 2001 EMC EN 61000-3-2: 2014; EN 61000-3-: 2013, EN55015: 2013/A1: 2015; EN 61547: 2009 ETSI EN 300-220-2 V3.1.1, ETSI EN 301-489-1 V2.1.1; ETSI EN 301-489-3 V2.1.1

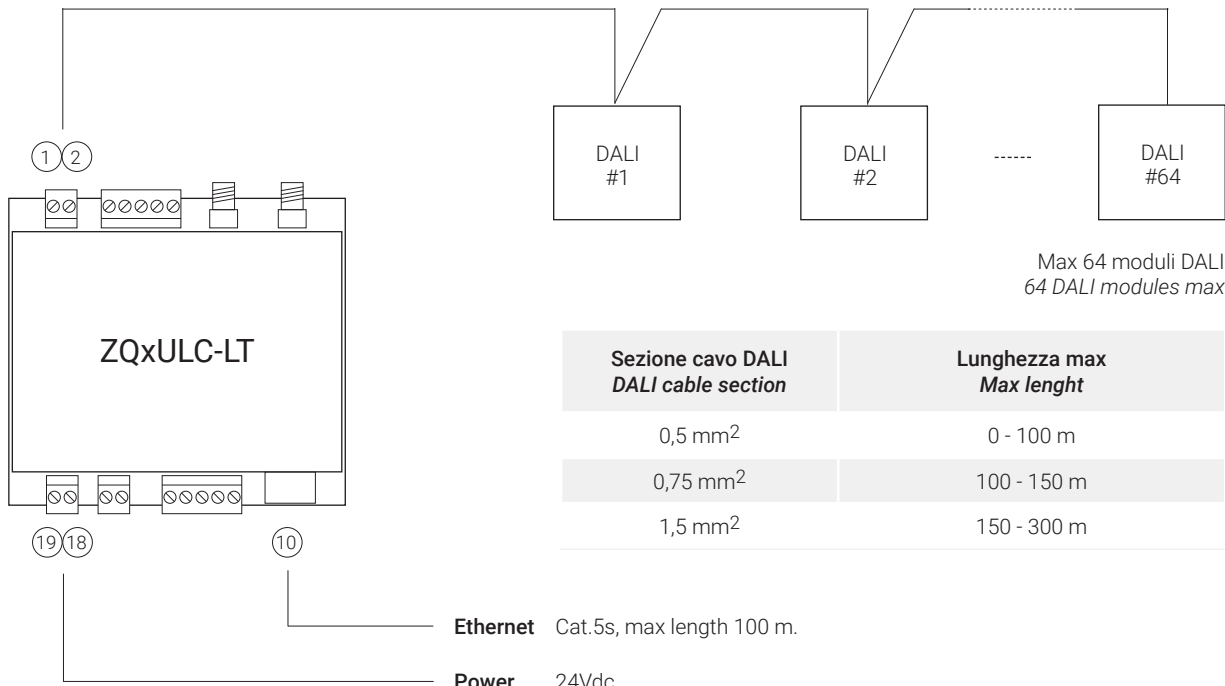
Connessioni | Wiring



- 1 DALI
- 2 DALI
- 3 Digital Output Common
- 4 Digital Output 4
- 5 Digital Output 3
- 6 Digital Output 2
- 7 Digital Output 1
- 8 2.4 GHz SMA female connector for external antenna
- 9 868 MHz SMA female connector for external antenna
- 10 Ethernet (RJ45)
- 11 Digital Input Common
- 12 Digital Input 4
- 13 Digital Input 3
- 14 Digital Input 2
- 15 Digital Input 1
- 16 RS485 - A
- 17 RS485 - B
- 18 Power GND
- 19 Power +24Vdc

Alimentazione, DALI ed Ethernet | Power, DALI and Ethernet

Cavo non schermato nè twistato (normale tipo per alimentazione). Lunghezza max: vedi tabella.
 Not shielded and not twisted cable (mains rated). Max lenght: see table.



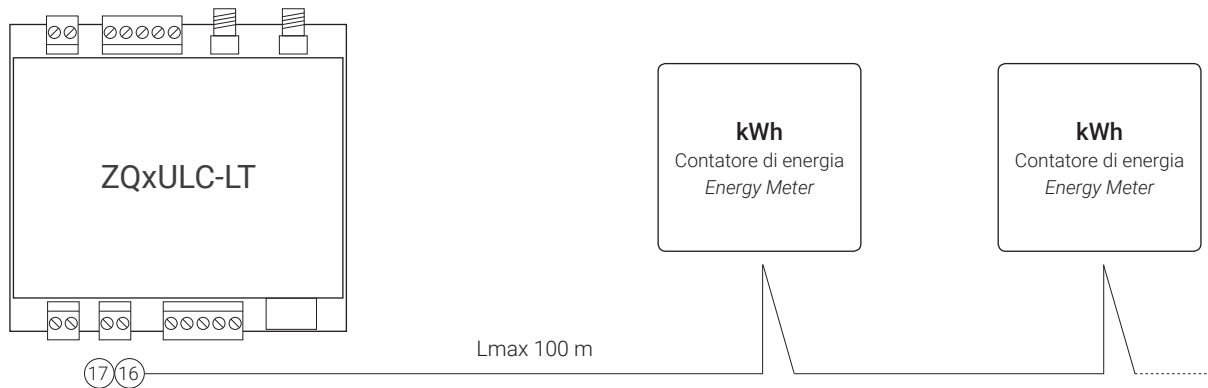
Max 64 moduli DALI
 64 DALI modules max

Sezione cavo DALI DALI cable section	Lunghezza max Max lenght
0,5 mm ²	0 - 100 m
0,75 mm ²	100 - 150 m
1,5 mm ²	150 - 300 m

Ethernet Cat.5s, max length 100 m.

Power 24Vdc

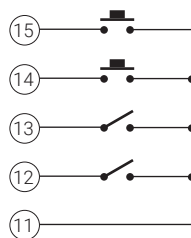
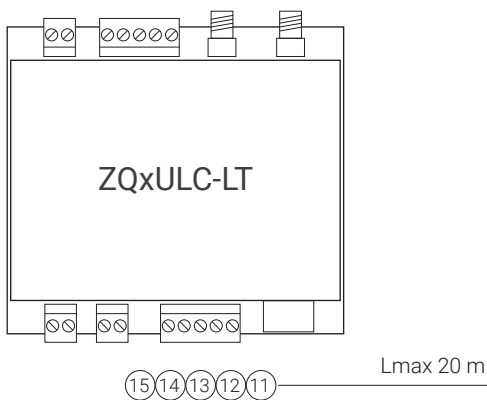
Seriale RS485 | Serial RS485



Cavo di lunghezza max 100 m, tipo schermato e twistato 2x0,35 mm² oppure compatibile Modbus.
Cable of max length 100 m, type 2x0,35 mm² shielded twisted pair or Modbus compatible.

Ingressi digitali | Digital Inputs

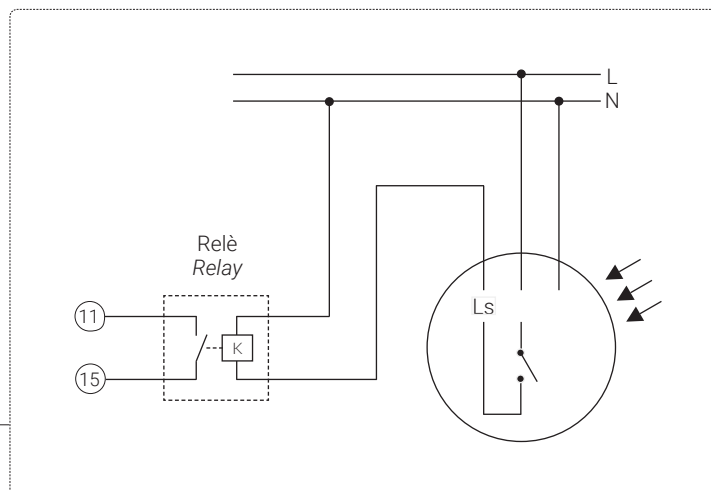
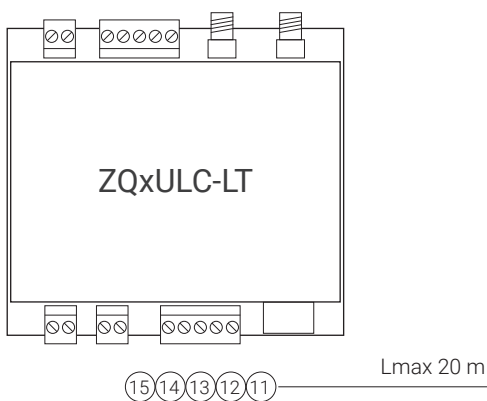
**Pulsanti di comando manuale
Push buttons for manual commands**



Ingressi digitali privi di potenziale per pulsanti standard NA ed interruttori.
Cavo tipo cat.5 o 5x0,35 mm²

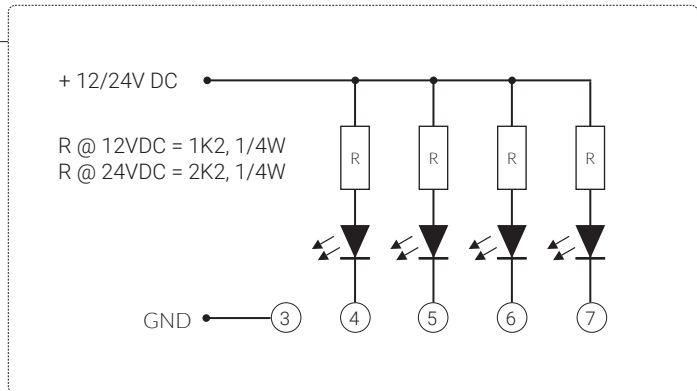
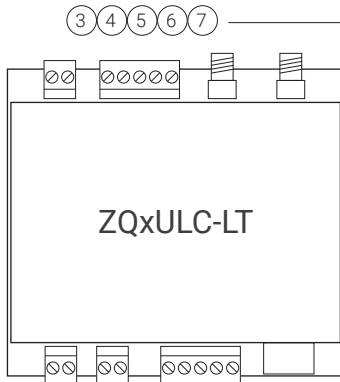
Dry contacts digital inputs for standard push buttons (NO) and switches. Cable type cat.5 or 5x0,35 mm²

Interruttore crepuscolare | Twilight switch

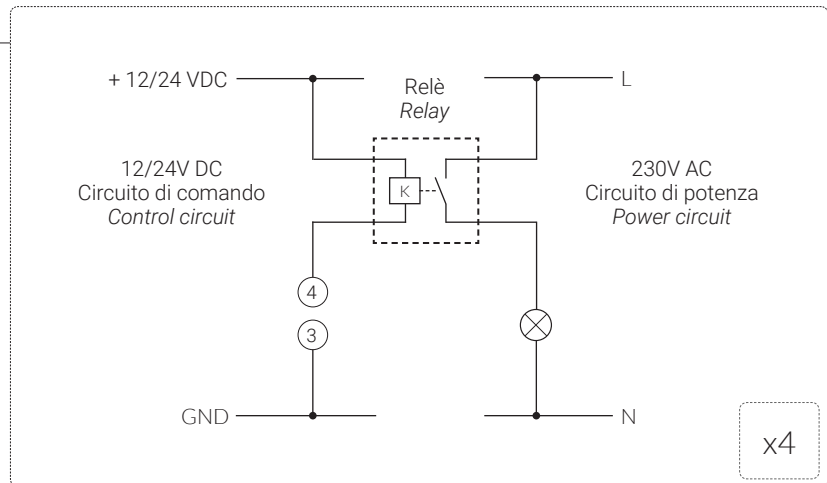
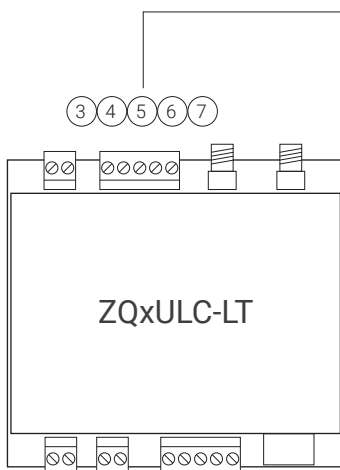


Uscite digitali | Digital Outputs

LED di segnalazione | Diagnostic LED

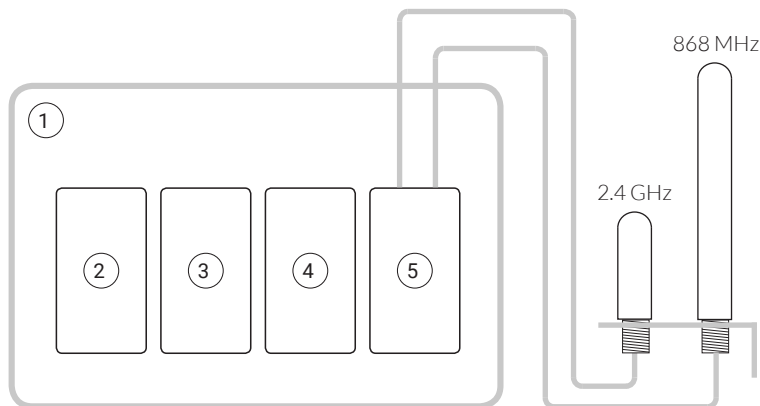


Circuito di comando relè di potenza | Power relay control circuit



Uscite digitali optoisolate: max 0,5A @ 125VAC, 1A @ 30VDC
Digital optoisolated outputs: max 0,5A @ 125VAC, 1A @ 30VDC

Outdoor control cabinet design (ZQxULC-LT)



- 1 IP66/IP67 junction box
- 2 Electrical protection devices (magnetothermal, fuse, etc.)
- 3 Voltage dischargers
- 4 24Vdc power supply (recommended with high overvoltage protection)
- 5 ZQxULC-LT universal lighting controller with external antennas