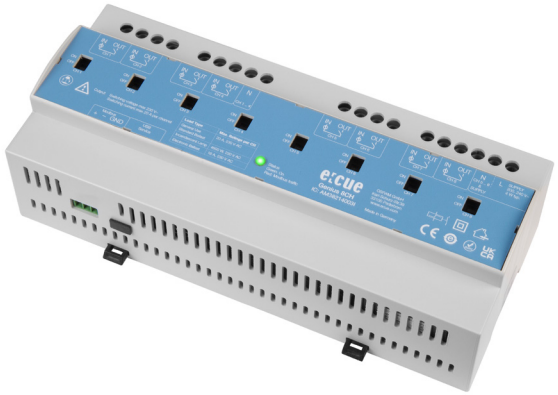
Genius 8CH



Genius 8CH

The Genius 8CH is a relay controller and energy meter that combines measuring and switching load in a single device. Communication with any third party system is made via the Modbus RTU / ASCII protocol at a RS-485 interface. The Genius 8CH provides eight bistable relay interfaces in single-pole, single-throw configuration, accompanied by manual switches for service overrides. It is a modular basic solution for controlling lighting installations. The Genius 8CH is easily mounted on standard 35 mm DIN rails, or with a key hole in the housing base on walls or on any stable vertical surface. The Node is AC line powered.

Highlights

- Eight bistable relay outputs SPST each for up to 20 A resistive load @ 230 V AC
- Measured data: Voltage,
  current,
  power (active, apparent, reactive),
  power factor,
  energy (active),
  phase,
  line frequency,
  status
- Connectivity via Modbus RTU / ASCII
- Flexible mounting on 35 mm DIN rails or surfaces

Delivery scope

	Identcode
· e:cue Genius 8CH	AM382140031

- Printed Genius 8CH Information for Use, Safety instructions
- USB A to USB Mini-B adapter cable

e:cue Interfaces

Lighting applications are heterogenous by nature. e:cue interfaces serve to integrate many networks, protocols and third party products into e:cue solutions. They also aid in applying special control functions for fixtures, they integrate analog or mechanical signaling into the digital world and offer bridging functions. e:cue interfaces are the links to bring together the many techniques and technologies of lighting control.

Product specifications

Dimensions (W x H x D)	213 x 90.5 x 62 mm/ 8.4 x 3.6 x 2.4 in (excl. fastening clip)
Weight	600 g / 1.32 lb
Input power	200-240V ±10% 50/60Hz AC
Power consumption	< 4 W
Operating temperature	-20 ... 50 °C / -4 ... 122 °F for > 40 °C, only use max. 4 channels up to 20 A load
Storage temperature	-20 ... 70 °C / -4 ... 158 °F
Operating / storage humidity	0 ... 80% RH, non-condensing
Overvoltage category	II
Installation conditions	IP20, not designed for outdoor use Intra-building connections only
Pollution degree	II
IEC protection class	Class II
Housing	Self extinguishing blend PC/ABS UL document E140692
Mounting	On 35 mm DIN rail (EN 60715) or with key hole on any stable vertical surface
Certificates	CE, RoHS, UKCA

Interface specifications

Relay outputs	8 x SPST feed-through latching relay with manual override, rising cage clamp for solid and stranded wire, wire gauge: 0.05 ... 5.26 mm² torque: 0.5 Nm Nominal voltage per channel: 115..230 V AC

Contact rating	Cycles
20 A, 230 V AC resistive load	1×10^5
4600 W, 230 V AC incandescent lamp	3×10^4
16 A, 230 V AC electronic ballast	6×10^3

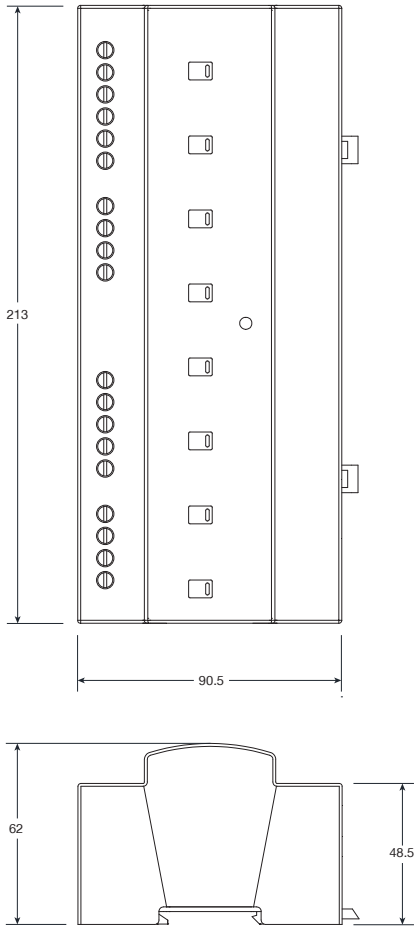
Inrush current: 500 A peak / 2 ms

Max operate frequency per channel: 10 ops. / min

Measured data	Voltage, current, power (active, apparent, reactive), power factor, energy (active), phase, line frequency, status
Measurement tolerance	± 3 %
Serial port	Modbus RTU / ASCII (RS-485), 3-pin pluggable connector
USB port	1 x Mini-USB, Type B
User interface	Combined LED for data activity and device status

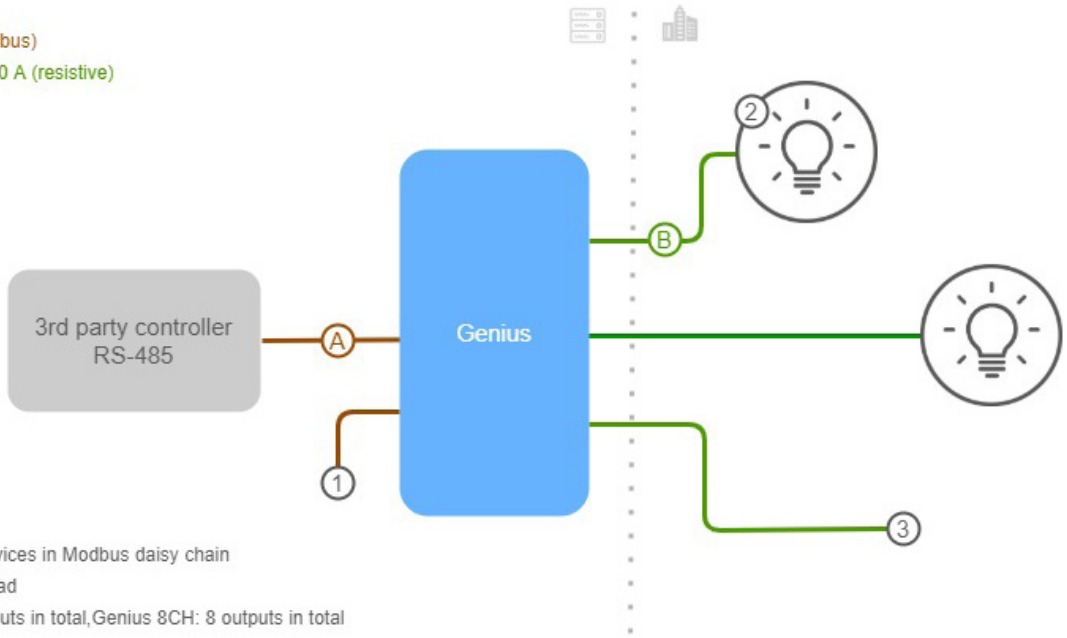
Dimensions

All measures in mm

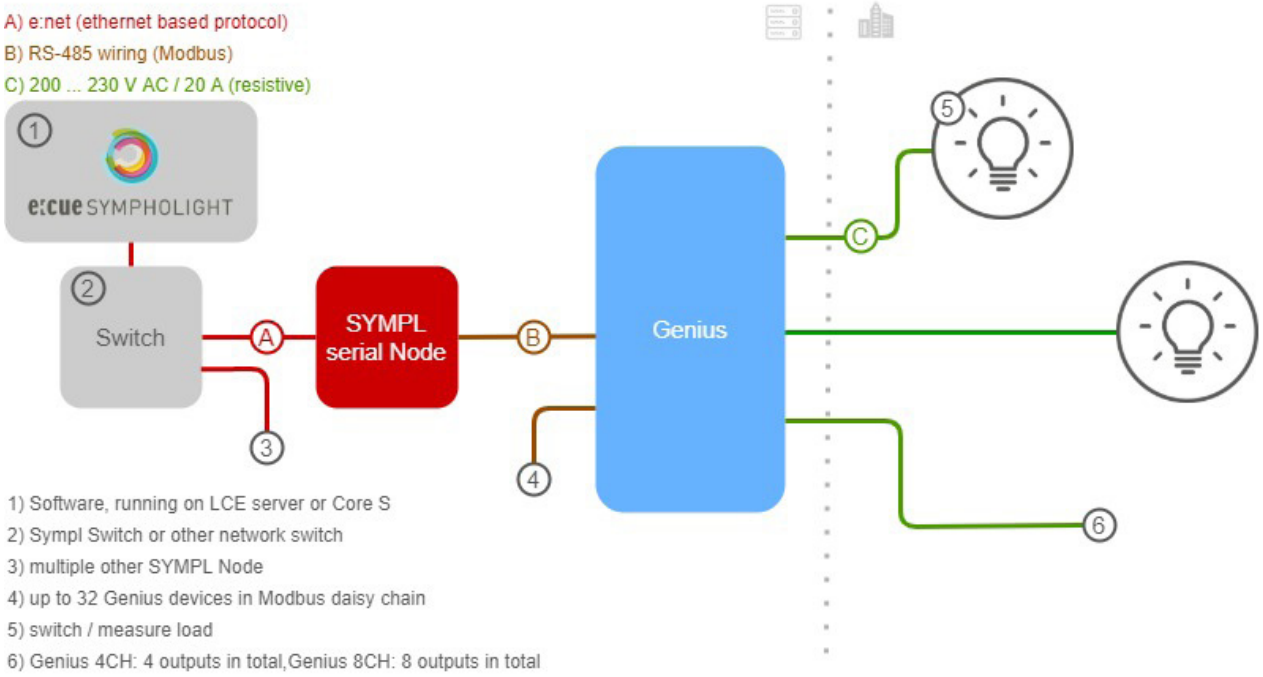


System diagrams

A) RS-485 wiring (Modbus)
B) 200 ... 230 V AC / 20 A (resistive)



1) up to 32 Genius devices in Modbus daisy chain
2) switch / measure load
3) Genius 4CH: 4 outputs in total,Genius 8CH: 8 outputs in total



Wiring diagram