



# DLC CSCU Plus

for Datek Light Control System

The Datek CSCU Plus is a component in the comprehensive Datek control and management solution for outdoor public lighting. Configured and used as a circuit controller together with a cloud based server, optimization for energy use, maintenance, and light pollution is greatly simplified with substantial cost savings.

## Technical Description

The CSCU Plus circuit controller serves as a field installed segment switch and communications hub. With 4x built in relay switches, 4x digital inputs, and 4x analog inputs it controls local equipment and relays information between the central cloud based server and field locations. It is equipped with backhaul interfaces for 2G/3G GPRS and LAN.

Embedded with powerful Datek control software the unit surveys and manages all connected equipment, log data, detects errors and forward alarms. With fail-safe logic, locally stored astronomic tables and backup power, it will step in to prevent detrimental system disturbances.

The CSCU Plus features numerous options for locally installed 3rd party equipment. Its execution environment is fully programmable to manage any sensors, actuators and communicate with other controllers. MODBUS IO extenders are available with many configurations for expanded functionality.

Applications include; LUX meter, SO power metering, tunnel controller, motion detection, water level sensing and generic analog sensors. With a hardened IP enclosure, the CSCU Plus can be installed in open air or internally in a streetlight cabinet.

With field installed Datek CSCU Plus in an outdoor public lighting infrastructure, a state of the art Smart City backbone is already in place. With over-the-air (OTA) software upgrades the customer is always assured an up to date solution with the newest features and functionality and opportunities for future custom applications.

DLC CSCU Plus is upgradable to a DLC Gateway with the addition of a ZigBee radio concentrator. A reduced functionality version with 2g (no 3G), limited power configurations and interfaces is available in DLC CSCU Basic, order number 101353.

## Ordering information

101354 - DLC CSCU Plus.

### General

32-bit Arm 7 processor, 2112 KB fast execution RAM, 4532 KB flash. SD-CARD reader up to 32 GB  
Qualcom QSC6270 3G / HSDPA /with up to 3.6 Mbps, UMTS / EDGE / GPRS support, CSD with up  
to 64 Kbps, SMS / PDU.

868 Mhz ISM RF transiver.

MTBF: 155 000 hours @ 25°C.

### Electrical specification

Power supply: 100 to 260 VAC Fused, 8-36 VDC reverse polarity protected.

On-board Li-Ion Battery: 2 Ah. GSM operation for minimum 6 hours. ZigBee communication and really  
functionality is disabled.

Unit Active: 6VA @220 VAC, 50 mA @12 VDC, All outputs are off.

Unit Active with GSM on: 7 VA @220VAC, 60 mA @12VDC, GSM idle @ -67 dBm.

Unit Active while charging: 630 mA, @12VDC.

24/12VDC out (dip switch).

3.3VDC out.

### Interfaces

1 x 10BASE-T Ethernet (RJ45).

4 x relay outputs (SPST) 5 A @250 VAC / 30 VDC.

5 x digital inputs, logic high: 6 to 40 VDC, logic low: -5 to 3 VDC (4 x IEC62053-31 Class A, 1 x reserved).

4 x analog inputs, 0..10 VDC or 0..20 mA, 12 bit resolution, precision ±1.5% @ 25°C.

All I/O's protected against transients and low-pass filtered.

Expandable I/O with standard MODBUS modules.

1 x RS232 channel with control signal.

1 x RS485 channel.

1 x shared RS232 / RS485 channel

1 x Antenna connector SMA Female (GSM 850-1900 Mhz).

Screw terminals (internal).

Cable glands: 3 x PG11, 2 x PG9(blind).

### Environmental specifications

Storage Temperature: 0 to +45°C.

Operating Temperature: -30 to +60°C (According to GSM 11.10 specification).

Battery charging range: -10 to +45°C (supervised and temperature throttled).

Humidity: (RH, non condensing): 5 to 90%.

Ingress protection: IP 65 (ruggedized polycarbonate enclosure with cable glands).

Weight: 0.810 Kg.

External dimensions: W 130 x H 180 x D 60 mm (excluding SMA connector, and cable glands).

### Approvals

Radio: EN 301 511 V12.5.1 & EN 301 908-1 V11.1.1 & EN 301 908-1 V11.1.1 & EN 301 511 V12.5.

EMC: EN 301 489-1 V2.2.0 & EN 301 489-1 V2.1.1 & EN 301 489-52 V11.0

RF Safety: EN 62311:2008

Product Safety: EN 60950-1:2006+A11:2009 & EN 61000-6-2:2001 & EN 301 511 V12.5.1

This product uses pre-approved radio modules from Quectel.



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