

# TECHNOLOGY OVERVIEW

# TRADITIONAL EMERGENCY LIGHTING

- Single battery type
- One charge rate
- Drives one out current
- Fixed led type
- Single output EM current
- Fixed duration
- CC/CV float charges



# GENERATION III

## A NEW ERA FOR EMERGENCY MONITORING AND TESTING

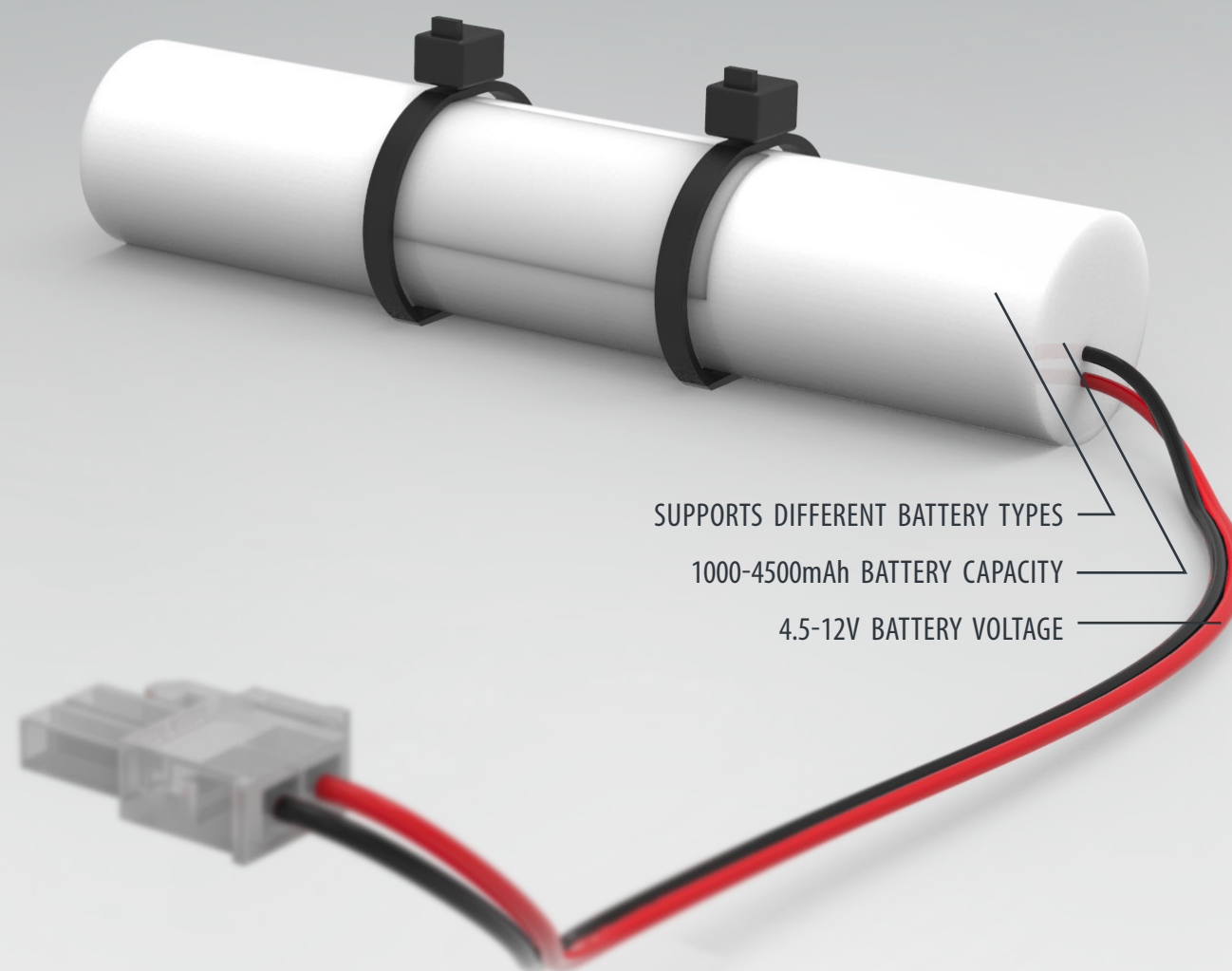


# BATTERIES

- CC/CV float charger
- Soft start battery charger
- Ability to recondition battery
- Battery disconnection protection
- Battery fault detection and auto recovery
- Cascaded PID LiFePO4 charger

## PROGRAMMABLE:

- Low battery voltage output
- Charge current
- Over voltage protection



## MAINTAINED LED DRIVE

- PID Closed loop control
- Very low output current ripple (10 % typical)
- Accuracy better than 5 %
- No flicker, analogue output
- Mains ripple immunity

### OUTPUT

- 3-14.5V Wide output voltage
- 0-1A Adjustable output current
- 0-10W Output power

## DIMMABLE MODE

- Down to 0.1 % light level
- Flicker free analogue dimming

### SMOOTH/SCALABLE DIMMING

- 12 bit + 12bit

### SUPER FAST RESPONSE

- ARC 0-245 in 1ms
- 0-1A in 1ms

## EMERGENCY OUTPUT

- Emergency output power 6 Watts
- Constant power (PID closed loop)

### SUPPORTS

- Buck
- Boost
- Buck/boost





## PROTECTION

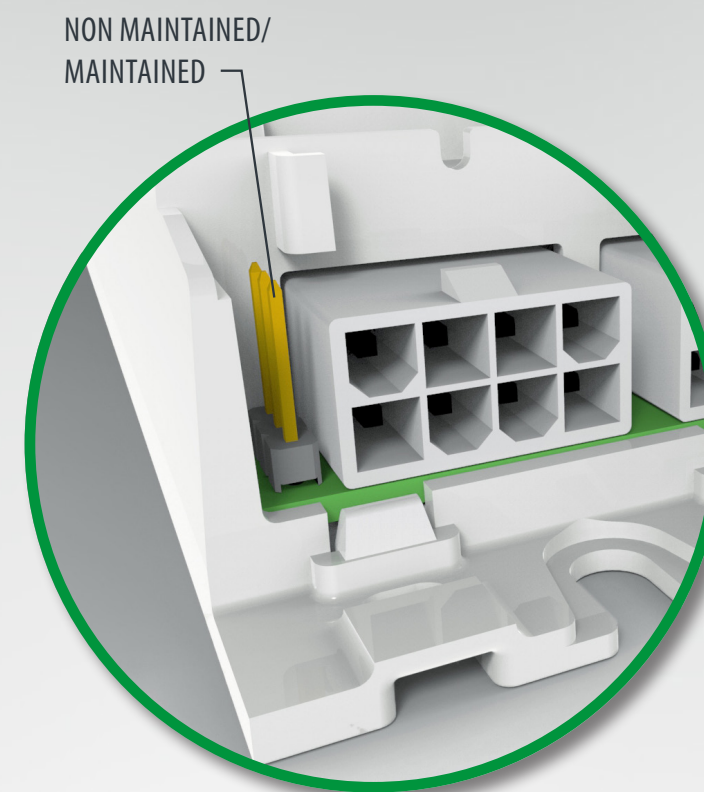
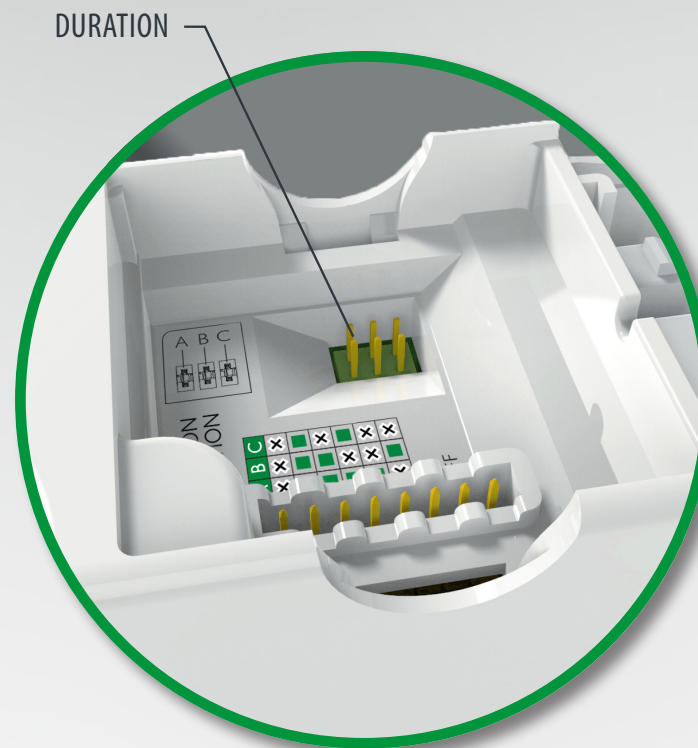
- Over voltage (open circuit)
- Over current (short circuit)
- Automatic recovery from fault conditions
- Lamp voltage detection (LED failure)

## SECONDARY EM LED

- PWM Controlled
- Direct from battery
- Provides secondary Emergency LED output

## USER CONFIGURABLE SELECTION

- Duration 1/2/3/4/8/CB
- Non maintained/maintained



## DALI INPUT

- Supports FT/DT
- 1/2/3 byte compatible
- Multi EAN for different durations
- Memory banks used for test logging
- Work simultaneously with switched active



- Full DALI compatability & certification
- Precise timing on DALI
- Device type 1 / device type 6

### SERIAL NUMBER

- GTIN
- OEM GTIN

## I/Os

### MULTISTATE INDICATION FOR:

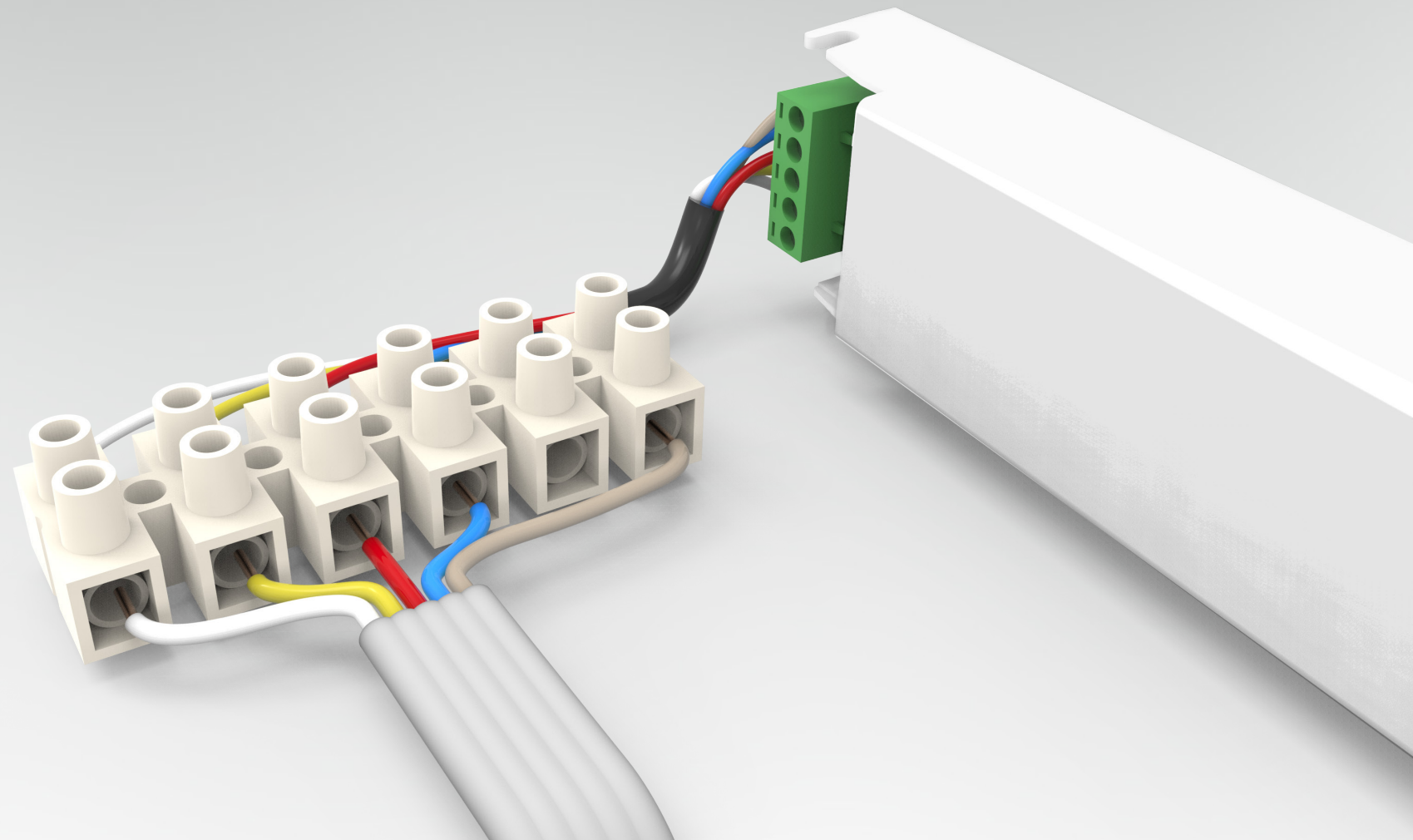
- Charge LED
- Indicator LED

### TEST SWITCH

- For easy commissioning
- Selections/modes etc

## SWITCHED ACTIVE INPUT

- Maintained mode ON/OFF
- Switchdim mode dimmer
- Corridor modes (many types)
- Rest override



## EKTOR TEST

- Supports 128 devices per line
- Extension of DALI

## SELF TEST

- Supports self test standard
- Commissioning from mains sequence
- Commissioning from test button sequence
- IEC 61034



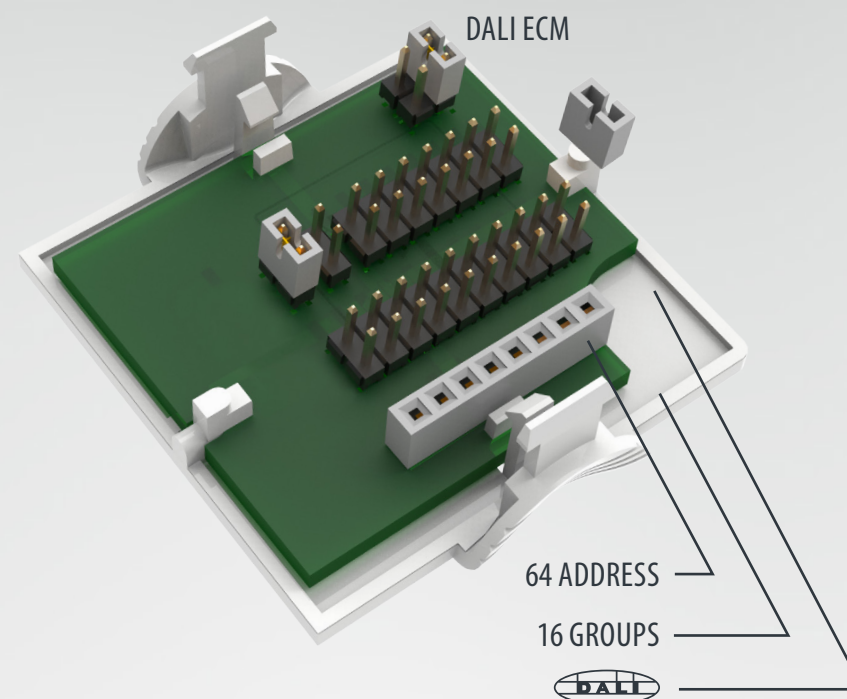
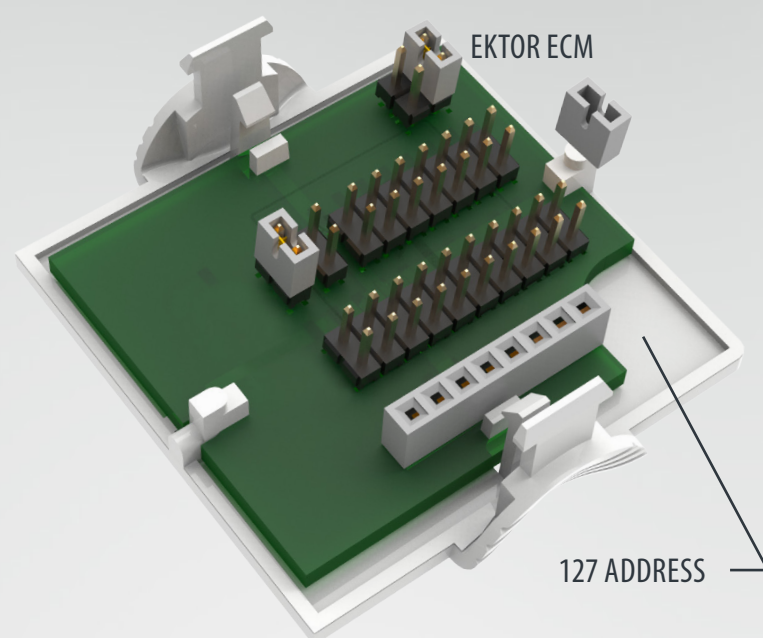
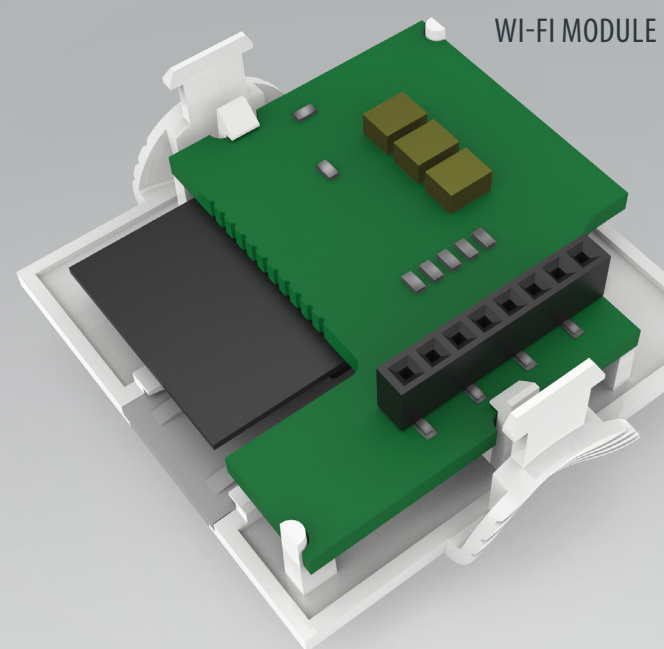


# EXPANSION MODULES

UART INTERFACE

FUTURE SUPPORT FOR:

- Bluetooth
- PIR
- Zigbee
- SPI, analogue etc



## WI-FI

- 2.4 Ghz, 802.11 B/G/N
- 8 simultaneous connections TCP
- WPA2 encryption TLS
- Internal antenna
- Optional external antenna U.F.L
- Broadcom BCM43362 Wiced API
- Extended 700Kb of flash
- RF transmit power = 19dBm
- NTP on Wi-Fi
- Soft AP & WLAN

## FIRMWARE UPGRADEABLE

- Wi-Fi dB supports OTA upgrade
- Over DALI
- Over Uart
- Over Wi-Fi



## SYSTEM

- MCU microchip 128K flash dsPIC33
- 32Kbit Extended EEPROM
- Low standby power <0.25W
- One PCB, multiple products

## DIAGNOSTICS/LOGGING

- Cloud synced
- Life time tracking from Cloud
- Number of dischargers
- Fault logging
- DT/FT logging on device
- Restart count/ lamp hours etc
- Apps & reports



