

# The Future is Bright with LED-Lights from the Pioneer in LED-Aircraft-Lights

Thiesen manufactures a wide range of the brightest, 100% Made in Germany, LED lights dedicated to

- Ultra Light Sport Aircraft
- Light Sport Aircraft
- Light Sport Helicopter
- Sailplanes
- Annex II
- Unmanned Aerial Vehicles / Drones
- and all kinds of Experimental Aircraft.

As with all of the Thiesen products, all systems are integrated into the light units, so there is no need for external controllers, power conditioners, or power supplies. This can provide a significant savings of weight, complexity, and COST!

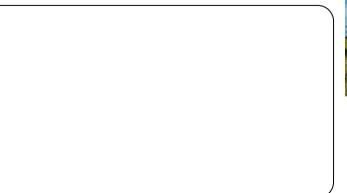


## Our headquarters:

Thiesen-Electronics GmbH Im Tiegel 9 36367 Wartenberg www.thiesen-electronics.com



### **Your nearest Thiesen-Electronics Dealer:**



# Thiesen Electronics GmbH

The Pioneer of LED-Aircraft Lighting-Technology!









# LED-Lights from the Developer and Manufacturer

Sports pilot and aviation enthusiast Juergen Thiesen is the founder of Thiesen-Electronics. From his aviation experience he was convinced that his expertise as an electronics engineer, coupled with his entrepreneural approach, could be combined to develop a range of products to help make flying safer.

Not satisfied with the available technology and products currently on the market, Mr. Thiesen envisioned new products that would take full advantage of the new and constantly improving capabilities of modern Light Emitting Diodes (LEDs).

His decision to develop and manufacture his own design of rugged and reliable LED light systems speaks for his dedication to the principle of "SEE AND BE SEEN!"

### FLARM - Interface

In order to make your aircraft more conspicuous, and attract extra attention from other aircraft on a potential collision course, Thiesen Electronics has developed Anti Collision Lights that can be linked to your on board ADSB/FLARM system.

**FLARM** is a traffic awareness and collision avoidance technology used in General Aviation, Light Sport, Ultra Light, Sailplane and even Unmanned Aircraft equipped with the ADSB/FLARM systems.

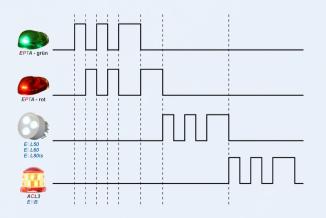
When an alert is given by the **FLARM** unit, the ACL flashing sequence accelerates according to the **FLARM** alert level. This increases the awareness of the pilot on the collision course.

#### Alert Level 1



## **Intelligent Synchronization is Intelligent Power Management**

The Thiesen "Intelligent Synchronization" system schedules the light pulses so that there is no overlap of the individual lighting flashes. As seen in the diagram below, this pulse scheduling reduces the battery and generator requirements as if only one light was on at any given moment.



## **ACL Flashes**, **Rotating Beacons**

#### ACL3is, ERB, ACL4, ERB2, ERB-UL, ACL-UAV

Features : Intelligent synchronization

Light Colour: Red

Op Voltage: 10 – 17 Volts DC, expt. ERB-UV-LiPo

: ACL4 - 10 W Flash + FLARM

ERB-UL - 12.8 W Rotating + FLARM

ACL3is - 20 W Flash

ACL-UAV-12V - 8 W Flash + FLARM,

Rotating, Remote Control

ACL-UAV-LiPo - 6.8 - 9 Volts DC (LiPo 2S), 5 Watts,

Rotating, Remote Control

Dimensions: 61 x 46 x 39 (L x W x H), Drillhole 4.5 mm

#### **Rotating Beacons**





ERB2-H with O-flange

FLARM-Interface. Features

> intelligent synchronization

Wattage : 16 Watts

Dimensions:  $61 \times 46 \times 56 (L \times W \times H)$ ,

Drillhole 4.5 mm



**ERBis** 

Electronic Rotating Beacon with intelligent synchronization

Wattage : 25 Watts

Dimensions: 61 x 47 x 76 (L x W x H), Drillhole 4.5 mm

#### **ACL-Module**

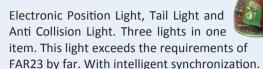
물…… 등 1동…… 등 1동…… 등 1동…… 등 1동…… 등 1동…… 등 1동…… Anti Collision Light flash bar with intelligent synchronization ACL-Module especially developed as a "rear-ACL" for gyrocopter and UAV.

Wattage : 20 Watts

Dimensions: 165 x 15 x 20 mm (L x W x H)

## **Position Lights**

#### **EPTA-LSA / EPTA-NG**



EPTA-NG : FLARM-Interface

Light Colour: Red and white, green and white

Op Voltage: 10 - 17 Volts DC Wattage : 20 Watts

Dimensions: 80 x 40 x 30 mm (L x W x H)

### **EPL - Electronic Position Light**

Since 2002 a

competent

partner in aviation.

Light Colour: Red resp. Green Op Voltage: 10 – 17 Volts DC Wattage: 4.5 Watts

Dimensions: 93 x 40 x 28 mm (L x W x H)

## **EPLTis - Tail Light Electronic Position Tail Light with**

Light Colour: Bright white Op Voltage: 10 – 17 Volts DC

intelligent synchronizaion

Wattage: 3 Watts

Dimensions: 60 x 44 x 28 mm

 $(L \times W \times H),$ Drillhole 4.5 mm

## **Landing Lights** with integrated ACL function

#### ELL50





ELL50L - Longer heat sink

Electronic Landing Light with intelligent synchronization. Replaces 90 W halogen lamp.

: Landing Light and ACL in one item with Features

intelligent synchronization

Light Colour : Bright white Op Voltage : 10 - 17 Volts DC

Wattage : 30 Watts : 50 mm Diameter

Installation depth: 40 mm (ELL50)

65 mm (ELL50L)

#### ELL60

Electronic Landing Light with intelligent synchronization. Specially developed heat sink.

Replaces 180 – 200 W halogen lamp.

Features : Landing Light and ACL in one item with

intelligent synchronization

Light Colour : Bright white Op Voltage : 10 - 17 Volts DC : 60 Watts Wattage

Diameter : 60 mm Installation depth: 50 mm

#### ELL80is

**Electronic Landing Light with intelligent** synchronization. Replaces 140 W halogen lamp.

: Landing Light and ACL in one **Features** 

item with intelligent synchronization

**Light Colour** : Bright white Op Voltage : 10 – 17 Volts DC

: 45 Watts Wattage : 80 mm Diameter Installation depth: 35 mm

