

LigLED

Lighting

LIGETECH AUTOMATION SDN BHD



COMPANY PROFILE

- **LIGETECH AUTOMATION SDN BHD** started in year 1997
- Specializes in SMT, AI, MI, Manufacturing, PCB assembly
- Trading in recon machineries
- Diversify into **LED Lights** in year of 2008
- **LigLED** slogan is “**Live in Green**”

LOCATION MAP



No. 60, 62 & 64, Jalan IMJ 2, Taman Industri
Malim Jaya, 75250 Melaka, Malaysia

HISTORY OF LED

- First light-emitting solid-state diode was made in 1907 by the British experimenter H. J. Round
- No practical use was made of the discovery for several decades
- In 1962, the first practical LED was invented by Nick Holonyak
- The first LEDs became commercially available in late 1960s. Commonly used as replacements for incandescent indicators and in seven-segment displays

KNOWLEDGE



LED technology continues to develop rapidly as a general light source. Progressively, abundant of LED lighting products are officially launched in the market.

What does retailers, energy efficiency advocates, commercial and consumers need to know on information on their buying decisions?

WHY USE **Lig**LED ?

Burning of fossil fuels around the world caused **global warming** due to **CO₂** released to the atmosphere when the fossil fuels are used to generate electricity, cars, motor, etc.

LED is best solution to solve the world lighting problems that too depend of fuel to generate electricity . The Advantages as:

- Reduce carbon footprint **CO₂**
- Reduce energy consumption (electricity bills), less usage of gas/ fuels
- Produces less heat
- Does not contain mercury and sodium gas
- Does not flicker and strain our eyes
- Long lasting usage

WHY USE **Lig**LED ?

- Local manufacturer with long experience in dealing electronics equipment & PCB assembly
- Assemble with reliable LED chips for long usage
- Design & use good internal and external drivers for long lasting usage
- Custom made LED product to satisfy customers need
- Fast after sales services to solve customers problems

WHY USE HIGH QUALITY LED CHIPS ?

- Low quality LED chips :
 - a) Tend to change colours
 - b) Brightness degradation
 - c) Uneven spread of light
 - d) Tend to have low CRI (Colour Rendering Index)
- Transistors coating in good LED are usually composed from high quality semiconductors.

LOW GRADE LED & DESIGN PROBLEMS



After less than a year of used, a poorly designed LED with used Low grade LED product can cause flicker, change in light colour, look dim, offer uneven light & damage easily.

GOOD LED QUALITY

- Brightness is equal to or greater than existing lighting technologies
- Light output remains constant over time
- Excellent colour quality
- Bad design can lead to a wide range of problems, some immediately observable and some not.

PROBLEM OCCURRED

- ❑ Existing Conventional Lighting used more than 10 years.
- ❑ Holder and fitting easily to break and melt/damaged due to overheating of old conventional tubes.
- ❑ High Current (Amp) cause the wire heat up and eventually effect the ELCB overload and tripped easily.
- ❑ Most of the conventional lighting works in low efficiency (Power factor).
- ❑ Changes of new conventional tube incurred cost and labour (Maintenance cost).
- ❑ Lighting trip usually occurred when cable short with ballast that will reduce the productivity, performance and effect the environment to employees.

MAINTENANCE COST INCREASE FROM TIME TO TIME

- Lighting cost as simulated – **10%** of total company electricity expenses
- Working environment **affected** due to poor lighting efficiency & brightness.
- **Cost increase** when any additional lighting request
- Ratio of **breakdown** increase from time to time
- **Disposal charge cost** for fluorescent tube (Waste control item).

Opportunity to collaborate with **LigLED** as Manufacturer with ideas of

a)Customer Purchase b)Profit Sharing Scheme

Advantages of Profit Sharing Scheme :

- ❑ No extra cost necessary for the improvement project.
- ❑ Convert electricity expenses to LED lamp payment.
- ❑ Product quality warranty for 5 years. (One to one exchange within agreement period)
- ❑ Lighting quality improvement after change.
- ❑ Lighting Environment maintain all the time.
- ❑ Reduce Heat factor - Saving for Air-Cond, Machinery electricity consumption.
- ❑ Maintenance cost saving.
- ❑ Electricity cost rate remain within agreement period (5 years) , No Tariff up impact
- ❑ Environment friendly product (LED lamp)

Disadvantages of Profit Sharing Scheme :

- ❑ Low usage ratio. E.g. reduce of working day, hrs...etc.
- ❑ High initial incurring cost

LigLED PRODUCTS

- LigLED Tube
- LigLED Bulb
- LigLED Down Light
- LigLED High Bay
- LigLED Flood Light
- LigLED Street Light
- LigLED Bay Light
- LigLED PAR
- LigLED MR16



BENEFITS OF LigLED

Lifespan

- Our product are 50,000 hours based on 24 hours usage /day which our LED chip are from OSRAM /CREE that proven by having LM-80 cert.

Materials

- Most common combination of Germany , USA and Japan.
- As for the heat sink, High Heat Dissipation Aluminium (Grade 1) material that can efficiently conduct heat away
- Material is important as it could even determine the lifespan of a product and withstand in a high and low temperature.

Safety

- Driver is likely to be “heart of a human“.
- Is an important issue which prevent from fire, generate it efficiently without overdriving the LED Chip and fuse installation on the driver for safety purposes
- Verification of Malaysia SIRIM Certification.

High Energy Efficiency

- Proven to be energy efficiency in term of the power factor which is >0.95 that can produce the most outstanding energy saving.
- Good Reputation LED's (OSRAM/ CREE)
- Good quality LEDs in well-designed fixtures is expected to have a rated useful life in the order of 40,000 to 50,000 hours.
- OSRAM LED chip which is a Germany Technology component substrate material in ceramic substances unlike others with mixtures of other substrate.

Colours

- Using the range of warm white to cool white (2700 to 6500K) which is suitable and comfortable for the eyes.
- Clearer vision while conducting an operation and patients will feel more comfortable resting in their rooms.

WARRANTY & SERVICES

- Our supporting is reliable, co-operative, and will provide with the best service and enhancing each day.
- **Ligetech Automation Sdn Bhd** provide Customer Trusted since 1997
- **LigLED** is a direct customer service as we manufacture our own.
- Support directly after sales service.
- Warranty is provided up to 3 years with validity.

Warranty NOT VALID if:

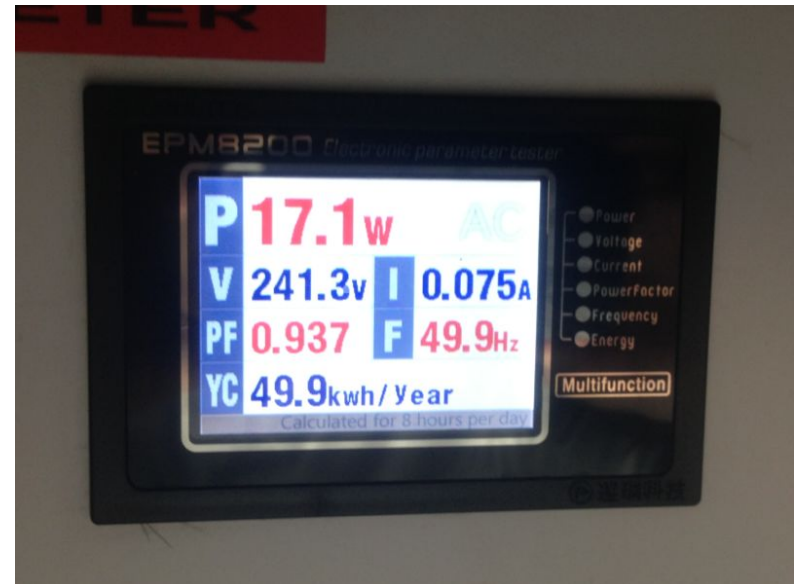
- Any disasters such as floods, fires, winds, earthquakes or lightning occurred.
- Repair or attempted repair by any other party rather than **LigLED** authorised technician
- Unable to provide us with the original proof of purchase, which must include the following information: name and address of seller, date and place of purchase, product model and serial/IMEI number.
- Operating with incorrect or irregular voltage supply.
- **LigLED** product serial has been removed/ broken or made illegible.

ANALYSIS DATA

Existing 4FT. Fluorescent Tube



LigLED T8 4FT. Tube Light



CUSTOMER LIST



San Miguel Woven Products





Lonnix (M) Sdn Bhd



CONCLUSION

When purchasing or specifying LED products, it is essential to evaluate appropriate data.

- Thus, it is critical to understand the needs of a given application in order to select the most appropriate technology.
- No matter how much energy can be saved, a product that does not meet the performance requirements is unreliable.
- Therefore, selection of good quality LED light (**LigLED**) will have a long lifespan, better quality, better luminous flux, and good after sales service.

MISSION & VISION

- To support organizations in the concept of Go Green & ECO-friendly environment & compliance to RoHS (Restriction of Hazardous Substances)
- To play an integral role in connecting the world to save energy and reduce **CO₂**

THANK YOU