



EXPERT in LEDs' DURABILITY

Sales and Marketing by
MOBITEL

- ✓ **MOBITEL is official representative of PROTON LED in Europe**
- ✓ **Part of MOBITELE International Group**
- ✓ **Since 1995 in telecom business**
- ✓ **MOBITEL's partners** include mobile operators and mobile service providers, producers from more than **30 countries** (mainly from Central and Eastern Europe and former Soviet countries), like **Telefónica O2, T-Mobile, KPN, Siemens, BMW, etc.**

✓ **Key services:**

Business Development consulting

Certification of telecom products/equipment

Mobile phones wholesale and logistics

✓ **Headquarters in Prague, Czech Republic**

✓ **Represented in:**

Germany

Austria

Poland

Cyprus

Russia

Ukraine

Moldova

Romania

MOBITEL's Partners



SIEMENS

PHILIPS



O₂



kpn

SYM PAC

About PROTON



- ✓ Producer of optoelectronic equipment, super bright LEDs and various LED lighting lamps, beacons, etc.
- ✓ Optoelectronic equipment manufacturing **since 1972**
- ✓ **Main products – LED Lamps and Beacons for mobile operators' base stations placed on buildings & towers which have to be equipped with safety signalling lights**
- ✓ **Complete R&D and production cycle since 1983**
- ✓ Proton's clients and partners:
 - ✓ Operators in Eastern Europe & Central Asia
 - ✓ Partners in UK, USA and Germany (traffic lights equipment)
 - ✓ Now the company is expanding its activities to Asian region
- ✓ Holder of ISO 9001:2001 certificate



PROTON's references



Proton has long term
cooperation with mobile operators





 PROTON LED

PRODUCTS OVERVIEW

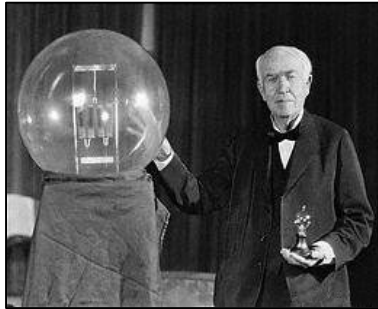
✓ Proton LED Lamps

✓ Proton LED Beacons

✓ Proton LED Systems



Proton LED



19th CENTURY – Addison gets
a patent on 1st electric light bulb



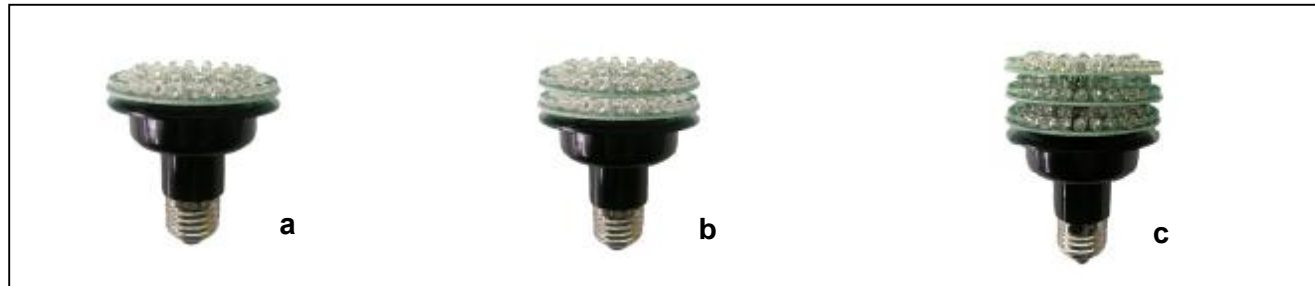
20th CENTURY – light bulb
in every house, on every street



21st CENTURY – future today!
LED Lamps – light of new age!



Proton LED Lamps



Produced in various colours for various voltages
& intended to substitute standard light bulbs.

Can be used on:



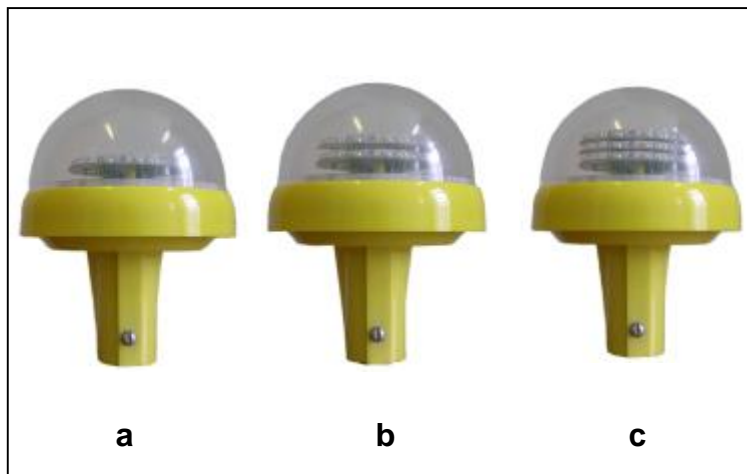
- High buildings
- Base station towers
- Chimney-stalks

Proton LED Beacons



Beacons have been a symbol of safety for vessels at all times!

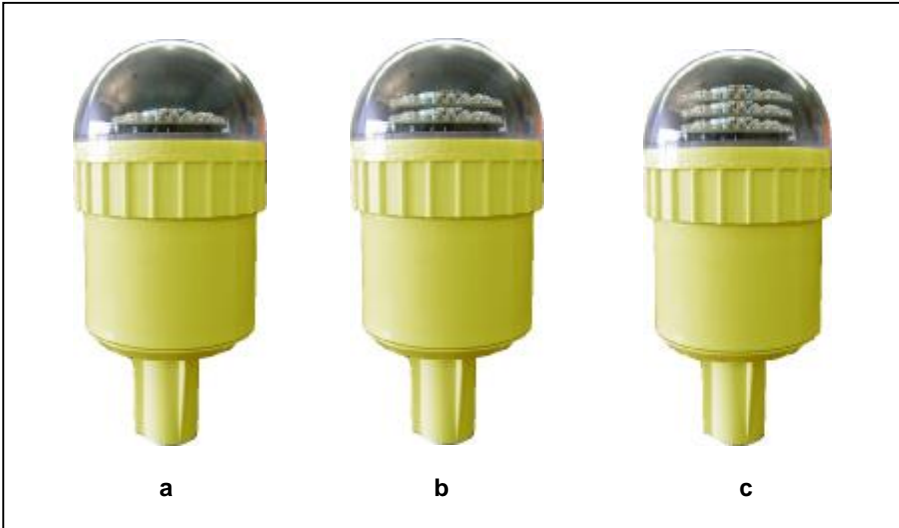
Today **LED BEACONS** serve for flight safety on water & in the air.



We cherish the traditions!

We work to make our **BEACONS** shine brighter and live longer!

Special LED Beacons



DEMOUNTABLE LED BEACON

With changeable LED element,
no need for changing
the whole Beacon.

THERMAL type LED BEACON – for cold weather!

Specially equipped with heating element
to prevent the lens from icing up.



Lamps & Beacons specifications



Luminous intensity, I_v , cd, no less than		Luminous distribution		Power consumption, $P_{cons.}$, W, not more	Supply voltage, $U_{sup.}$, V	Emission color	Temperature, °C (operating conditions)
group	level	in a vertical surface	a round-up angle				
A	10	from -6° to +6° and from +10° to +50° $I_v \geq 4$ cd; from +6° to +10° $I_v \geq 10$ cd	360°	5	AC/DC 12,24,38,48 AC 110	W-white, Y-yellow, G-green, R-red, B-blue	From - 60°C to + 60°C
				10	AC220		
B	20	from -6° to +6° and from +10° to +50° $I_v \geq 4$ cd; from +6° to +10° $I_v \geq 20$ cd	360°	10	AC/DC 12,24,36,48 AC 110		
				18	AC 220		
C	32	from -6° to +6° and from +10° to +50° $I_v \geq 4$ cd; from +6° to +10° $I_v \geq 32$ cd	360°	18	AC/DC_12,24,36,48		
				15	AC 110		
				25	AC 220		

LED SYSTEMS



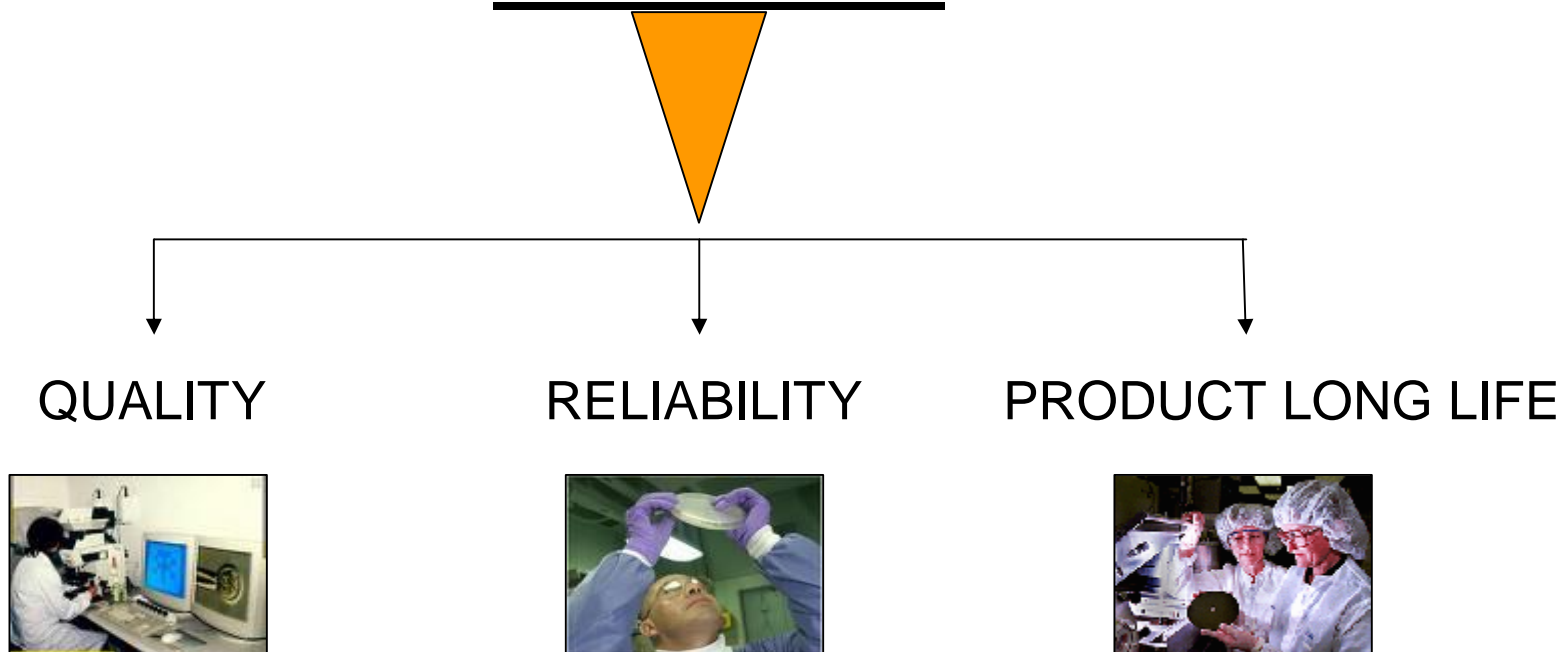
Any building or object can be equipped with controlling system:

- Base station location
- Tall building
- Tower



Our specialists customize every system to Client's needs

- What is DURABILITY for us?



Durability



QUALITY



RELIABILITY



PRODUCT LONG LIFE



ENSURED BY

**OUR OWN
COMPLETE**

RESEARCH & DEVELOPMENT

PRODUCTION

PRODUCT TESTING

**PRODUCTION
CYCLE**

HIGHLY RELIABLE AND LONG LASTING LED PRODUCTS

Why Proton LED?



PROTON LED - Expenses reduction:

24 times less costs on lamps' maintenance and replacement

16 times less energy consumption per lamp

PROTON LED - Ecology protection:

48 times less used lamps to be utilized



PROTON LED - Quality guarantee:

12 years - Working life!

5 years - Warranty period!

References & Contacts



✓ MOBITEL's references

from operators: **Telefonica O2, KPN, T-Mobile (MOBITEL is a holder of official certificate of T-Mobile Profi Partner)**

from banks: **HVB AG Germany, HVB Bank Czech Republic (Austria Bank)**

Independent information on MOBITEL can be obtained from **Dun & Bradstreet Czech Republic**

Certified quality: **ISO 9001:2001** Certificate from **BUREAU VERITAS QUALITY INTERNATIONAL**

Permanent exhibitor at **CeBIT (MOBITEL is a holder of CeBIT Partner official certificate)**

and **GSM Congress since 2003**

✓ MOBITEL Headquarters:

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