

Quantec Beacon ICAO Medium-intensity, Type A / B / C Mesh "LED20kmain4x" (en)

The Quantec Beacon "LED20kmain4x" obstacle light completely integrates the control inside a compact housing.



Key features

- Type of obstacle light can be changed by configuration
- Mesh radio network (optional)
- Heater (CCV) (optional)
- UTC synchronized flashing using GNSS with global coverage
 - GPS / QZSS, GLONAS, Galileo, Beidou
- Configurable flash rate
- DIP-Switch to set configuration, flash rate and light profile (optional)
- Astronomical clock
- Integrated brightness sensor
- Integrated logbook (capacity for ~20 years)
- 2 RS485 communication interfaces
- · Visibility meter support
- ModBus digital I/O support
- Alarm contacts
- Digital input to activate test-mode
- Built-in overvoltage protection: Class III according to IEC61643-11
- Connection options
 - Single M16 connector for easy and fast installation (standard)
 - Connection terminal and cable gland for individual installation (optional)
- 24 V DC and 230 V AC supply options
- Maintenance free
- Corrosion resistant materials for all surfaces
- Highly UV and ozone resistant optical units and seals

Performance characteristics

- Effective Intensity:
 - white: adaptable, up to 20 000 cd
 - red: adaptable, up to 2 000 cd
- Flash rate: adaptable from steady to 60 FPM
- Horizontal angle of radiation: 360°
- Vertical beam spread: >3°

Supported light profiles

• ICAO Medium-Intensity, Type A, B and C

Technical specifications

					-
General					
Item numbe	er	14590			_
Illuminant		16 white LEDs, 20 r	16 white LEDs, 20 red LEDs		
Approvals (pending)		Will be certified according to (depends on available LED option): ICAO Annex 14, 5th edition FAA AC 150/5345-43G STAC			
Conformity		CE, RoHS			
Electrical	characteristics	;			
Supply volta with Dip Sw		18 – 30 V DC, nomi 230 V AC	nal volta	ge 24 V DC	<u> </u>
Power consumption and peak current (typical)		Operating mode	P _{avg} [W] *	I _{peak} [A] *	
		Medium- Intensity, Type A (day) (20 000 cd white)	30	2.5	
		Medium- Intensity, Type A (night) (2 000 cd white)	3.2	2.5	
		Medium- Intensity, Type B (2 000 cd red)	9.5	2.5	
		Medium- Intensity, Type C (2 000 cd red steady)	29.8	2.5	
		* Values are subject to change			
Relay contact rating	Max. switching voltage	30 V AC			
Rated current		100 mA			
Mesh radi	o (optional)				
Frequency		2.4 GHz ISM band			
Transmission range		approx. 1.5 km	approx. 1.5 km		



Quantec Beacon ICAO Medium-intensity, Type A / B / C Mesh "LED20kmain4x" (en)

M16 Connector Pinout

Signal	Pin	Function	
24 V U+	1	Supply voltage	
RS485 Port 1 Data-	2	PC terminal interface or slave communication port	
RS485 Port 1 Data+	3		
RS485 Port 2 Data-	4	Interface to the visibility sensor, ModBus module or master communication port	
RS485 Port 2 Data+	5		
K2 /Fail	6	Relay 2 contact open when errors are present	
K1 /Warning	7	Relay 1 contact open when warning or day mode active	
GND	8	Ground	
SVInfo	9	GND (or open): Inactive, +24 V: Test mode, 9.6 kbit/s: Data mode	
K1/2 Common	10	Relay 1 and 2 common	
Shield	Housing	Earth grounding	

Terminal Pinout (optional)

Signal	Pin	Function	
PE	1	Earth grounding	
СОМ	2	Fail relay Contact open when errors are present	
NO	3		
230 V N	4	Grid supply Input	
230 V L	5		

Technical specifications (continued)

Physical characteristics		
Dimensions (H \times Ø)	279 mm × 252 mm	
Weight	approx. 5,8 kg	
IP rating	IP 68	
Operating temperature	-40 °C to +55 °C (-40 to 131 °F)	
Relative humidity	0 to 100% r.H.	
Material	Anodized aluminum, seawater resistant	
Mounting	Footholds	

Drawings

