

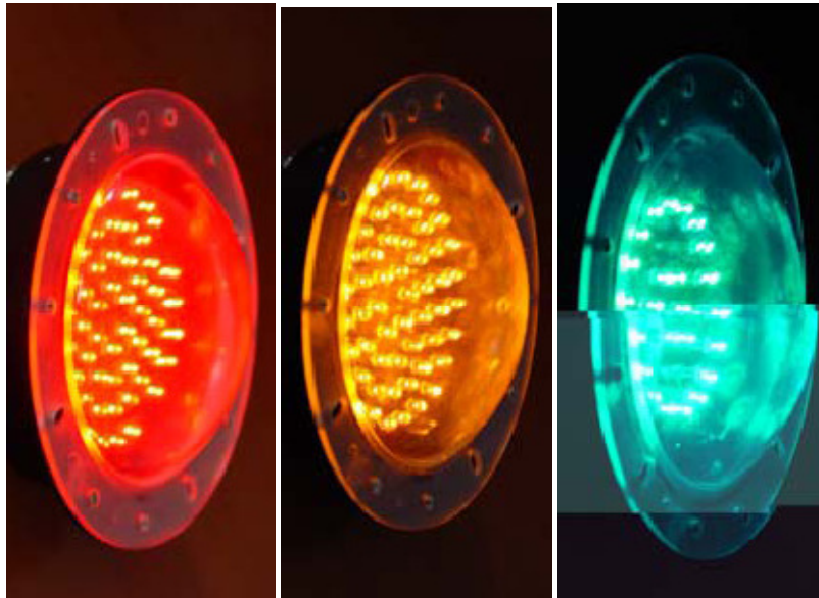


Doc No: AES/LSA/Spec/01.

Specification for LED Signal aspects (Main Signal) for Railway Applications

Areca Embedded systems pvt Ltd
(An ISO9001:2000 certified company)

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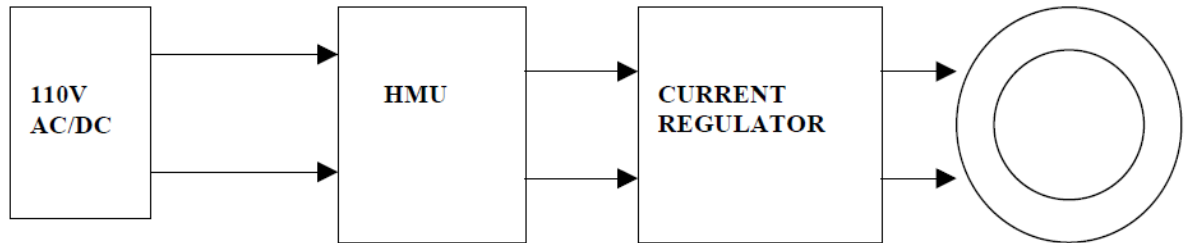
ARECA LED Signal aspects are designed to meet Indian Railways RDSO Specification no: RDSO/SPN/153/2002 (Amendment-1), for use in the Indian Railway signalling systems. The LED based lamps are housed in ABS Plastic and UV Stabilized polycarbonate dome. The lamps are designed to minimise reflection from external light sources.

Specifications:	
<p>LED Lamp</p> <ul style="list-style-type: none"> • Colour : Red / Yellow / Green • <i>Auto Identification to current regulator</i> • Organisation : Multiple Arrays • Excitation : From current regulator • Illumination : 120/110/110 lux at 1.5m • Colour co-ordinates <ul style="list-style-type: none"> ○ Red /Green: <ul style="list-style-type: none"> Class “C” of BS 1376-1947 ○ Yellow : <ul style="list-style-type: none"> Class “B” of BS 1376-1947 • Retro-fittable in existing incandescent fittings • Breakdown voltage <ul style="list-style-type: none"> 2 kV AC (rms) for 1 minute • Insulation Resistance <ul style="list-style-type: none"> >100 MΩ @ 500V • Dispersion angle: < 8 degrees • Operating temperature : -10 to +60°C • Net weight : 	<p>Current regulator</p> <ul style="list-style-type: none"> • Micro-controller based • Auto sensing of Lamp colour • Input : 110V ± 20% AC/DC • Input current <ul style="list-style-type: none"> ▪ AC - 125 mA (rms) ± 5% ▪ DC - 105 mA ± 5% • Output: Regulated current • No. of Arrays: 2 • Output regulation over operating range ± 2% • Noise immunity : 65V AC • AC immunity in DC mode : 300V • Breakdown voltage <ul style="list-style-type: none"> 2 kV AC (rms) for 1 minute • Insulation Resistance <ul style="list-style-type: none"> >100 MΩ @ 500V • Dispersion angle: < 8° • Operating temperature : -10 to +60°C • Net weight : • Overall size :

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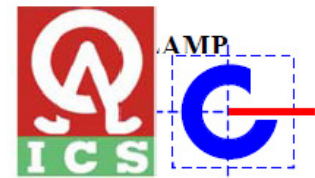
HEALTH MONITORING CUM ALARM UNIT

MAIN INPUT : 110 V AC, Single Phase, 50 Hz
 INPUT VARIATION : +/- 15%
 AUX INPUT : 24 V DC
 INPUT VARIATION : +/- 20%
 OPERATING TEMP. : -10 Degree C To 60 Degree C (RH Upto 90%)
 ASPECT FAIL : <50% illumination OR <20lux illumination OR ECR dropping treated as fault condition.
 INDICATION : Audiovisual alarm with audio silence is provided.
 Visual indication for aspect fail and card fail is provided.
 *Remote audiovisual alarm unit provided with reset switch.
 *Sensing on the same connection wires.



Other Products:

- PCI bus based GPS time synchroniser
- Fiber optic voice data link with hot standby (LC-Launcher Link)
- PCI bus based IRIG time reader
- Voice-data communication system (1 voice, 4 serial channels and 16 digital channels)
- Fibre Optic OLTE for telemetry systems up to 5 MBPS
- Universal Fibre Optic multiplexer (User configurable inputs and outputs)
- LED display boards



ISO 9001 : 2000
Reg.No:RQ91/1725