

# LED Signal Unit for Subsidiary Aspects With Built in Current Regulator Calling On, 'A' Marker, 'AG' Marker

## Features:

- Light Emitting Diode (LED) technology offers the ultimate in reliability, resulting in lower operating and maintenance cost.
- Compatible with SSI and Relay Interlocking.
- Phantom Free Design, Multi array arrangement, Low Power Consumption, Fail Safe Design.
- Comply with the general and technical requirements of LED signal units for railway signaling application in RE, NON-RE installations
- Minimum visibility distance of 200 Meter (In clear daylight with peak sunrays at rated voltage).
- LED Signal Lighting Units is visible to a driver stopping at the foot of the signal.
- Lamp proving possible through Relay (ECR) or Electronic Means (EI)
- YELLOW and WHITE
- UV Stabilized lense to meet outdoor applications
- Current regulator is Built In
- Approved by RDSO Lucknow- Indian Railways



AG Marker

A Marker

Calling On

**RDSO Specification No.**  
**RDSO/SPN/153/2011**

## Technical Specifications:

| Aspect Name            | Calling ON                                        | 'A' Marker, 'AG' Marker                 |
|------------------------|---------------------------------------------------|-----------------------------------------|
| Color of the Unit-     | YELLOW                                            | WHITE                                   |
| Power Supply           | Built-in current regulator unit operated on 110 V |                                         |
| Input Variation        | ± 20 % (88 to 132 V)                              |                                         |
| Input current          | 150 mA (RMS) + 10% -20%                           |                                         |
| Load Regulation        | ± 2% (From 88V to 132V)                           |                                         |
| Display Area           | 125 mm ± 1 mm                                     |                                         |
| Operating Temperature  | -10°C to +70°C (RH UPTO 95%)                      |                                         |
| Illumination           | 45-70 Lux                                         | Min 50 Lux (No stencil in front of LED) |
| Dispersion angle       | 4° to 10°                                         | -                                       |
| Color Co-Ordinates     | Class 'B' of BS 1376/1974                         | Class 'C' of BS 1376/1974               |
| No. of LEDs            | Min 30                                            |                                         |
| Isolation level        | 1.5 KV AC (RMS) for 1 minute                      |                                         |
| Insulation level       | > 100 MΩ                                          |                                         |
| Guaranteed Off Voltage | Below 60 V AC                                     |                                         |
| LED Failure Detection  | Before Light output lower than 50% of nominal.    |                                         |
| Weight                 | 1.5 Kg                                            |                                         |

**Note:** A/AG and other marker signals are not covered under RDSO specification