

LED SIGNAL LIGHTING UNIT
MAIN ASPECT WITH INTEGRATED CURRENT REGULATOR
(As per RDSO Specification No. RDSO/SPN/199/2010 Rev. 1.1)



INTEGRA LED Signals designed to offer higher luminous efficiency, reliability and lower operating costs for Railway applications.

Main Features

INTEGRA make LED Signal has been designed to meet the requirement of Railway Signaling Safety.

- * LED Signal Lighting Units is visible to a driver stopping at the foot of the signal.
- * UV Stabilized lense to meet outdoor applications
- * Compatible with SSI and Relay Interlocking
- * Comply with the general and technical requirements of LED signal units for railway signaling application in RE, NON-RE, METRO & MONO RAIL installations
- * Minimum visibility distance of 600 Meter (In clear daylight with peak sunrays at rated voltage).
- * UV Stabilized lense to meet outdoor applications
- * Unit comply to IP-65
- * Current regulator is Built In

Technical Specifications:

Color of the Unit	RED / YELLOW / GREEN
Input Current	110 mA to 150 mA (Within 110V +/- 25% & -10°C To 70°C)
Input Variation	82.5 to 137.5V
Power Supply	110V AC, SINGLE PHASE, 50Hz
Power Factor	Better than 0.8
Load Regulation	± 2% (From 82.5V to 137.5V)
Illumination	RED & GREEN - 150 Lx (-10% to +40%), YELLOW -175 (-10% to 40%)
Display Area	125 mm dia ± 1 mm
Dispersion Angle	4° to 10°
Operation Temperature	-10°C To 70°C. (RH UPTO 95%)
Color Co-Ordinates	RED & GREEN - Class 'C' YELLOW - Class 'B' OF BS 1376-1974
No. of LEDs	Min. 60 in case of Red and Yellow, Min. 30 in case of Green
Di-electric Strength	> 100 MΩ
H.V. Breakdown Test	2kV applied between All current carrying terminals shorted together and Earth for 1 minute
AC Immunity	Upto 60V AC
LED Failure Detection	Before Light output lower than 50% of nominal.
Fail Safety	As per CENELEC Standards EN 50126 & EN 50129