

ECE (INDIA) Energies Private Limited

Traffic Signal Controller:

Our road traffic signal controller is microcontroller based and fully programmable & employs solid state integrated CIRCUITS. Silicon devices for timing & control circuit & optical isolation for lamp head switching.

We have 2 Versions of Control panel for Traffic Management

- a. CPU with 24 output lines
- b. CPU with 32 output lines

Features:

- Solid State Switching of Phases
- Manual Mode Operation
- Auto Mode Operation
- Flash mode Operation
- All Red switching Plan
- Amber Plan
- Police Panel
- Manual Signal Shut Down
- Hand-held Terminal for Programming
- Total freedom for Programming
- Can be up graded for Cable less synchronization using global positioning system (32 line controller)
- Auto shut down on power fluctuation beyond limits and auto start up on restoration with battery backup for RTC/ Critical data



Application

- Urban and Rural areas for effective control of traffic flow.
- Handling capability for bigger junctions.

Benefits

- Low cost and Effective Traffic management.
- Easy and flexible Programming facility ensures effective traffic control on any type of inter sections
- Easy installation and cable termination

Operational Specification of Controller:

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Cycle Plans	4/24 cycle plans with 24/32 entry one each plan
Output lines	24/32
All Red plan	User programmable
Amber plan	User programmable
No. of Signal Groups	User programmable 15/24
Signal Plans	15/24 Signal Plans
Day plans	4/7 day plans
Signal Sequences	<ul style="list-style-type: none"> a. Vehicular Groups: Red – Green- Amber SWITCHING PATTERNS FOR GREEN <ul style="list-style-type: none"> I) FLASH II) STEADY b. PEDESTRIAN GROUP: <ul style="list-style-type: none"> 1) RED-GREEN-RED FLASH 2) RED-GREEN-GREEN FLASH
Modes of Operation	Independent & Synchronized
Switching	Solid state switching with Zero Crossing
Signal Shutdown switch	A switch is provided to remove the signal light source supplies without interfering with the supply to the controller operating circuits. When the signals are switched on again the controller shall operate in the current running cycle.

Technical Specifications of Control panel

CPU	Powerful 8 bit microcontroller
Memory	128 k
Clock	Built-in RTC
Maximum Power consumption of CPU	5 Watts
Supplied Load per output	5A
Input Power	180 to 270 V AC, 50Hz
Maximum Power Consumption	100 Watts
Operating temperature	0-55 ⁰ C
Humidity	95% AT 40°C (NON-CONDENSING)
Enclosure	Powder coated M.S Box with IP-64 protection and provision for Pole mounting and Ground mounting, separate key for Police Panel and main Panel
Removable Front Panel	All Electronic Components including the Power supply are mounted to the front panel so that the panel can be removed from the chassis for maintenance & trouble shooting purposes.

Note: - Material can be modified as per customer specification.