VA/ATCS Traffic Controller – WiTraC

Parameter	Specifications
Make	**ENVOYS**
Model No.	**EMTC-10-WL**
General Description	Innovative Traffic Controller – WiTRAC having distributed architecture in Master-Slave configuration for LED Lamp switching over wireless(ISM band 2.4GHz) medium for data communication between Master & Slave. It Works on either Solar power or conventional 230VAC mains. WiTRAC is compatible with CDAC's CoSiCoSt-W and TraMM based Area Traffic Control System(ATCS) Command & Control Application Softwares.
Salient Features	Distributed architecturewith 1 Master and 15 Slave controllers (Max). Wireless operation eliminates road cutting-refilling & cable laying operations associated with conventional Traffic Controller.
Modes of Operation	Pre-Timed/Fixed, Vehicle Actuated, Semi-Actuated&ATCS.
Operating Parameters	
Signal Plans, Phases & Stages	32Phases, 32 Stages, 24 Cycle Plan, 20Day Plan, 4Week Plan20Special Day Plan, 4Hurry Calls
Extended Modes of Operation	Cable less Synchronization Pre – times, Vehicle Actuated, Semi Actuated Remote Administration Hurry Call, Forced Flash, Junction Off, RTC update, Signal Time Update, Plan Download
Extended Features (Programmable)	All Red, Start Amber, Red Extension, Stage Skipping
Signal Sequence	Vehicular Group: R-G-A-R- (Green can blink, steady or steady and Flash mode) Pedestrian Group**:** Red-Green – blink on/off
Safety Features	Self-diagnosis on power up and runtime, Green–Green Conflict Monitoring Lamp failure / Short circuit Monitoring, Fallback on AMBER flash in case of conflict or error condition.
Hardware	
CPU	32-bit Microcontroller
Memory	Flash memory Minimum of 512KB and 128KB RAM.
Real Time Clock (RTC)	The RTC has minimum of 10 years' battery backup with maximum time tolerance of ±2 Sec per day. Time resolution 0.1 sec
LCD Display&Hand-Held Terminal-Keyboard	20 x 4 LCD display interface with backlit option, 16 Keys Keyboard interface
Communication Ports	RJ 45(Remote Administration), RS232(Debug & data logging), USB (Firmware Update)
Output Switching	Through solid state devices, 16 outputs per Master and Slave controller (scalable from 32 to 256 outputs)
Police Panel Control	Lamps OFF, Auto/ Manual-Step, Forced Flash and 4 Hurry Call
Number of Detectors& Interface	20 to 24
Programming Facility	Through PC interface via RJ 45 port and Through LCD-Keypad Console
Electrical	
Power Supply	230V ±10%, 50Hz or 12V DC ±10%
Environmental & Dimensions	
Temperature &Humidity	Temp. 0^{0} C to 55^{0} C, Humidity 95% RH Non-condensing at 40°C
Enclosure Type &Dimension	Pole Mountable - Master Controller: 580mm x 340mm x 200mm Slave Controller: 530mm x 320mm x 170mm
Certification	IEC – 60068 (ERTL)