The 2070LN advanced traffic CU (Controller Unit) meets and exceeds current CALTRANS specifications. The hardware is built on the Motorola VME platform, which provides an open data buss that accepts interface cards from a number of sources. The software developed by Trafficware Group, Inc. supports the OS-9 operating system called for in the CALTRANS specification.

The 2070LN bridges the gap between NEMA TS-2 and CALTRANS 170E controllers by providing full I/O capability with NEMA using the TS-1 "A", "B", "C", and "D" connectors and with Type 170E cabinets using I/O connectors defined in the CALTRANS specifications. The NTCIP protocol ensures that the 2070LN is fully compatible with ATMS applications at the communications level.

In addition, Trafficware is partnering with Cisco to provide WAN applications using Cisco’s routers to interconnect signals on fiber networks using TCP/IP protocols to take NTCIP where it was intended to go.

The CALTRANS 2070LN specification defines the hardware and operating system for the CU and provides a high-end platform to develop software applications for ITS. Trafficware software developers are pushing the envelope with this new technology by providing a 4-ring, 16-phase, 16-overlap controller with many new features and improvements over the old NEMA and 170E.
# 2070LN ITS Controller

## FEATURES
- Direct replacement for 170 CU
- Compliant with CALTRANS 2070LN specifications
- SDLC compatible communications
- 2 - RS232 connectors (Type 170 C2 and C20 connectors)
- Ethernet interface for WAN applications using Cisco router

## ITS CONTROLLER FEATURES
- NTCIP compatible database as well as communications
- 16 Phases, 4 timing rings / 16 programmable overlaps
- Same controller can serve as a master AND local

## COORDINATION
- 2 NTCIP coordination modes (fixed and floating force-offs)
- 7 additional coordination modes
- 5 modes of walk recycle during coordination
- Adaptive splits (Critical Intersection Control)
- 48 patterns (unique cycle, offset, splits and sequence)
- Shortway/longway transition using Begin or End Green

## PREEMPTION
- 6 selectable fire or rail preempt programs
- 4 selectable transit programs
- Return to coordinated phase after preempt

## MEASURES OF EFFECTIVENESS
- 64 detector inputs provide volume / occupancy MOE’s
- Occupancy-on-green allows local detectors to be used
- Complete detector diagnostics built into the controller

## TIME-OF-DAY / TRAFFIC RESPONSIVE / TRAFFIC ADAPTIVE
- Action plans called by time-of-day
- 100 action plans selecting a pattern
- 3 auxiliary functions / 8 special outputs per plan
- Day plan copy function
- Manual control screen
- Trafficware "Easy" scheduler for faster entry
- Additional pattern based options and detector maps
- Traffic responsive operation using on-street masters
- CIC adaptive split algorithm