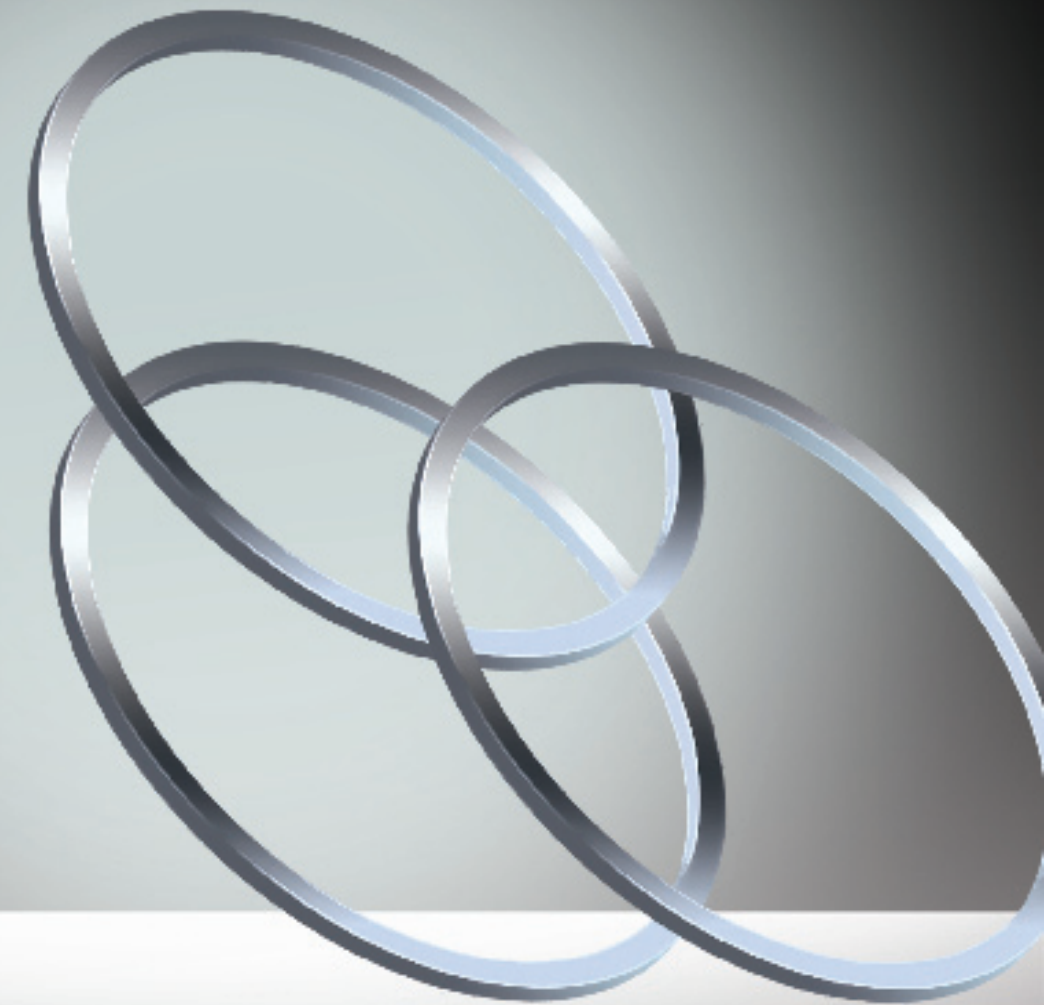# NextPhase

Tap into the Power of the Next Generation

Siemens provides leading-edge traffic technology for the fast-paced Intelligent Transportation Systems world. Whether providing local controllers, video detectors, controller firmware, central systems, system analysis, design, integration, or consulting services, Siemens brings innovative and reliable solutions to customers. Siemens has a long history of quality and innovation in transportation control and management.

Coupled with proven products and development experience, as well as highly regarded consulting services, we form the world's foremost traffic control and transportation management company. Siemens is very active in the development of new industry standards, and we have helped to form positive industry standards and develop new "state-of-the-art" products, including the NTCIP C2C protocol and the Advanced Traffic Controller Specification.

For more advanced future features and/or more information on Siemens software products call 512.837.8310 or call you local dealer. See our website at www.itssiemens.com to locate a dealer in your area.

Siemens reserves the right to alter any of the company's products or published technical data relating thereto at any time without notice.

www.itssiemens.com

SIEMENS

www.itssiemens.com

Designed to tap the power of the new Advanced Transportation Controllers.

NextPhase intersection management software is a next-generation approach structured to satisfy the most demanding of modern traffic signal control applications. NextPhase is designed to tap the power of the new Advance Transportation Controllers, such as the Model 2070 controller. These "open platform" ATC controllers separate hardware from application software by defining a common controller hardware platform upon which multiple application software packages from multiple developers can operate. Open systems protect agency investments and reduce life-cycle costs by assuring a mechanism for agencies to upgrade software and functionality without being tied to a single supplier for these upgrade. NextPhase was designed from the ground up to take full advantage of open platform ATCs and provide capabilities not previously available.

NextPhase is more than just a traffic controller software. It is a fully distributed intersection management package designed for optimal isolated or system coordinated management. The package can support extensive local traffic optimization capabilities and flexible coordinated operation. Communications capabilities include California's AB3418 and the National Transportation Communications for ITS Protocol.

Controller Options

The NextPhase software is designed to operate on the Model 2070 controller hardware and other compatible "open" ATCs. NextPhase is the only traffic control software that operates on all 2070 platforms conforming to the Caltrans TEES / ATC Type 2070 Standard.

The Caltrans Model 2070 specification currently provides for different versions of the controller. The original Model 2070 (or 2070C) is configured for operation in a Model 33x (170-type) cabinet with standard C connectors. The Model 2070N is configured for operation in a NEMA cabinet using ABCD connectors.

Caltrans has developed multiple optional configuration for Model 2070 controllers. Some features such as the front panel display, VME bus, and power supply can be changed or omitted for applications not requiring the features of a fully equipped 2070 controller. These options allow for lower cost controller configuration while maintaining the same software compatibility and cabinet interface options. NextPhase will operate on any of the different Model 2070 controller configurations.

Features

NextPhase takes advantage of the power of ATC controllers to provide a rich array of features.

NextPhase supports 40 phases, 20 rings, 26 barriers, 20 overlaps, 10 preempts, and up to 250 plans.

Rings can be set to operate independently (without barriers), or they can be synchronized as groups (with one or more common barriers). Any phase or overlap can be assigned for vehicle and/or pedestrian actuated operation. The software configuration flexibility allows many special control configuration including: Left-turn / pedestrian overlaps, multiple intersection control from a single controller, and up to 10 preempts configurable for railroad or emergency vehicle operation.

Cabinet Input/Output function mappings are completely user-definable. A single software version can support both NEMA, 170[type, and custom cabinet configurations. Each field input (i.e. detector) can be assigned to act on any defined phase or overlap for vehicle and/or pedestrian actuation. Inputs can be combined via a boolean logic. A phase or overlap can have any number of assigned inputs. NextPhase supports high-speed system communications using standard AB3418 or NTCIP protocols. Easy to use menu driven user interface with spreadsheet style data entry and multi-table parameter database. Access to controller database may be password protected. Up to 250 timing sets including all timing parameters may be stored in the controller database. All timing parameters can be changed by time of day. For ease of use, typical cabinet mappings and phasing configurations are pre-defined in the controller database and may be customized from there.