



SeMARC™ Intersection Software Solution

Description

Siemens SEMARC™ Closed-Loop Master Software drives the coordinating master in a closed-loop traffic control system. SEMARC™ software combines system management control, monitoring, and data collection capabilities for up to thirty-two (32) intersections. One master controller with SEMARC™ software can control and supervise the Traffic Program Selection for two (2) independent groups. Siemens now offers its versatile SEMARC™ Closed-Loop Master Software on the Siemens MARC, 2070 ATC, m50 Series NEMA controller, and Siemens m51 and m52 (with fiber modem) controllers. the ATC^{NXTM} controller. The SEMARC™ Closed-Loop Master Software is fully compatible with Siemens local controllers, and provides continuous real-time monitoring and reporting of conditions for each interconnected ATC^{NXTM} or 2070 ATC (with SEPAC™ software), EPAC™ m40/ m50 (actuated), or EPIC (interval) controller.

The friendly, English language-based user interface allows full system access from the on-street master or from an optional central office site via Siemens MARC NX or ACTRA™ Windows-based central system software packages. The remote access allows master and local intersection programming and monitoring, providing improved programming efficiency while reducing errors.

Features

- The system features a SSM(Signal System Master) with the ability to select system timing plans responsively based on surveillance of actual traffic conditions, Time Base events, manual, and/or remote commands.
- Primary system objectives are:
- Flexibility of traffic responsive and / or time base (timeof-day/day-of-week/month day-of-year) system control.
- System diagnosis from a single site.
- System monitoring and reporting at a single site.
- System timing modification from a single site.
- Multi-level back-up operation.
- Minimize reliance on and cost of communications.
- Staged implementation capability.
- Future potential for multi-level central operation.



SEMARC™ Controller Software by Siemens

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System Functions

The principal function of a computerized traffic control system is to provide optimum area-wide, traffic responsive signal timing. Secondary functions provided by a computerized traffic control system include:

- **Traffic Responsive:** The SSM computes smoothed values of current traffic volume + occupancy at various locations throughout the system, and matches (compares) them with values of various traffic pattern thresholds stored in the SSM memory.
- **Malfunction Detection:** Once malfunctions have been detected, the SSM logs the event and reports selected malfunctions to the Central, where used.
- **Time Base:** The time base events are scheduled on a time-of-day/day-of-week/month/day-of-year basis and are initiated from SSM memory as a result of time. A time base event shall select the traffic pattern (Dial, Split, Offset, Free, and Flash) and special functions.
- **Back-up Modes:** In the event of a system failure, such as a SSM malfunction or a communications failure, the SSL will continue to operate in accordance with the last system timing information for a specific interval of time.

System Controls

- MARC/2070ATC/m50 Series based
- Thirty-two (32) Local Intersections
- Two (2) Independent Traffic Control Groups
- Sixty-four (64) System Detectors
- Forty-Eight (48) Traffic Coordination Patterns
- Sixteen (16) Timing Plans with Cycle Length, Splits, & Offsets
- Priority Based Program Selection (Manual, Remote, Time Based, Traffic Responsive)
- Common Group Sync Reference (Crossing Arterials)
- Group Traffic Responsive Operation
- Matching Program Technique (based on V+O)
- Group Time Based Traffic Operation
- One hundred eighty (180) Event Capacity
- Ten (10) Week & Ninety-nine (99) Day Programs
- Group Time Based, Manual and Remote Traffic Plans



m50 Controller

ATC™ Controller

All of Siemens controllers and accessories are built with the highest standards in quality and manufacturing. With a long standing history of technological innovations, well renowned customer service, and high quality products and services, Siemens is the leader in traffic technology products and solutions. For more information on our product line see our website at www.itssiemens.com.

For more advanced future features an/or more information on Siemens software products call +1.512.837.8310 or contact your local distributor (see website for the 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.

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