



Traffic Signal Management:

GoSignal — Intelligent Signal Control at Scale



GoSignal delivers comprehensive control and visibility for traffic signal networks of any size. It manages every signal controller as a fully tracked asset — monitoring online status, collecting live controller data, and showing every intersection on interactive map layers. Operators create, configure, and monitor signals from a single console, with each agency's data kept securely separate.

GoSignal speaks the protocols deployed in the field. It connects to controllers over NTCIP 1202/SNMP, alongside support for MaxTime, ASC3, AB3418E, D4, EOS, and Cubic protocols. A two-tier polling model keeps data fresh without overloading controllers: a scheduled full poll captures a complete picture of each signal, while a faster update cadence streams the most time-critical values in between.

Coordinated control is built in. Operators issue signal commands — pattern selection, phase hold, preemption, stop time, ring max, special functions, vehicle recall, and time sync — through a prioritized command queue that runs multiple command types at once and automatically clears stale requests. Reusable signal plans group commands across many signals, can be scheduled, and apply consistent priority levels.

GoSignal turns corridors into engineered systems. Signals link into corridors built from mapped roadway segments with length, speed-limit sections, and phase configuration. The corridor time-space diagram surfaces measured progression metrics — bandwidth, arrivals-on-green, and split performance — while proven methods including MaxBand, MultiBand, and AM-BAND recommend coordination improvements, checked for safety before they reach the field.

Traffic Signal Management Feature Highlights:

- Multi-Protocol Control
- Corridor Optimization
- Priority Command Queue

CONTROLLER PROTOCOLS

STANDARDS	<i>NTCIP 1202, ASC</i>
CONTROLLERS	<i>MaxTime, ASC3, AB3418E, D4, EOS, Cubic, SEPAC</i>

POLLING & COMMANDS

TWO-TIER POLLING	<i>Scheduled full poll, fast live subscriptions</i>
COMMAND TYPES	<i>Pattern, hold, preempt, stop time, recall, sync</i>
PRIORITY QUEUE	<i>Multi-type queue, auto-clears stale requests</i>

CORRIDORS & OPTIMIZATION

TIME-SPACE DIAGRAM	<i>Bandwidth, arrivals-on-green, split metrics</i>
OPTIMIZATION	<i>MaxBand, MultiBand, AM-BAND; safety check</i>

DATA & DIAGNOSTICS

CONTROLLER DATABASES	<i>Draft/live DBs, backup, CRC, firmware track</i>
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** Controller protocols and optimization methods scale to controller firmware and deployment configuration.*

** Polling and update intervals are configurable per signal for near-real-time status.*