3080 OSP CARD AND CARD CAGE

3080 OSP

The 3080 Optical Signal Processor (OSP) is TOMAR's mid-range OSP providing the advanced detection and discrimination of all 3000 Series OSP's with improved system security and upgradability. Installed inside the traffic cabinet, the 3080 provides power for 209X Optical Detectors, receives and prioritizes signals from the detectors, and optically isolates the preemption channels.

The 3080 responds on a first-come, first-served basis to optical signals from vehicles within two signal bands. Emergency band signals are typically emitted by emergency vehicles to effect a preemption of normal traffic control timing and are given the highest priority to allow rapid emergency response with enhanced safety.

Transit band signals are generally emitted by transit or other non-emergency municipal vehicles to effect a priority change for the vehicle's approach direction without necessarily interrupting traffic control timing.

The 3080 OSP is compatible with NEMA TS-1, TS-2, and CA/NY 170, and 2070 controllers and meets all NEMA and CalTrans environmental requirements. The 3080 plugs directly into a 170 input file without any additional hardware and does not use the internal 24VDC cabinet power. For NEMA cabinets without prewired preemption slots, the TOMAR model 1881 rack provides the necessary hardware and harnessing to allow simple connection to detector outputs and controller inputs.

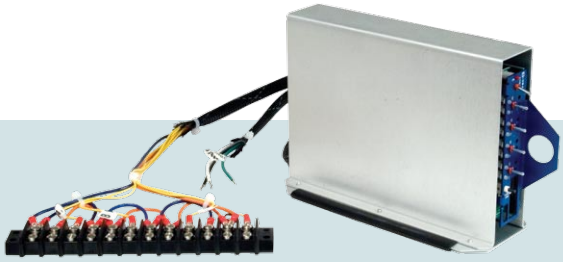
The TOMAR 3080 Optical Signal Processor offers the following features and benefits:

Modular construction allows tool-less field repair and firmware upgrades. Competitive products must be returned to the factory for proper repair.

Plug-and-Play Firmware allows the ability to add preemption channels or other accessories in the field without manual configuration. This allows you to buy only what is needed today and add more capability later, saving precious funds.

Active Reflection Suppression prevents cross street preemption due to reflected emitter technology. Only TOMAR's advanced, digital signal processing can eliminate this troublesome side effect making system installation and setup far less critical.

Preemption channel disconnect switches allow the preemption outputs from the 3080 to be physically disconnected from the controller inputs during setup and testing. This allows traffic technicians the ability to perform all system setups and testing without disrupting traffic flow.



1881 Card Cage and Harness

The 1881 Card Cage provides all the necessary hardware and harnessing required to allow the simple wiring of the 3140 card to the detector outputs and controller inputs. The 1881 is equipped with two 60" long cables which are wired to the controller. The first cable carries all 115 VAC power wiring, safety ground, and card outputs. The second cable is terminated to a 12 point terminal block which is typically mounted in the wiring compartment of the cabinet. The detectors are then connected to the terminal block.

3080 OSP Card and Card Cage

True 10 Year Warranty:

The 3080 OSP and all STROBECOM II components are covered under the 10 year warranty. Unlike other manufacturers, TOMAR's warranty has NO FEES or charges for warranty repairs.

Specifications for OSP Card

Item	Description
Signal	The 3080 shall be capable of receiving and prioritizing the Emergency and Transit signals transmitted by all TOMAR and competitive emitters. The 3080 shall be configurable via a jumper on the control module, to accept or reject older non-coded optical signals. The 3080 does not uniquely identify any emitter codes when accepting or rejecting non-coded optical signals.
Signal Acquisition Time	Typical signal acquisition time shall be approximately 2.5 seconds. Acquisition time will vary depending upon the number of signals present simultaneously and on the density of optical noise.
Simultaneous Signals	Each signal processor module shall be capable of receiving 10 signals simultaneously. Additional simultaneous signals will be ignored.
Range	2500 feet maximum adjustable down to 200 feet in 255 steps for each signal band.
Range Adjustment	Range adjustment shall be accomplished via front panel switches and emitter.
Priority Determination	Signals in the Emergency signal band shall be given priority over signals in the Transit signal band. Signals in the same band shall be serviced on a first-come, first-served basis.
Output Signals	The 3080 shall provide four optically isolated output channels for placing calls on the traffic controllers preempt inputs. All output signals shall comply with NEMA signal level definitions.
Max Call Timer	Each channel shall be equipped with a MAX CALL TIMER which will disable a channel's response to an emitter should that emitter remain within range for more than 2 minutes. Once the emitter is shut off for 10 seconds or more the channel shall again respond to that emitter.
Electrical Requirements	120VAC 50/60 Hz
Temperature Range	-40 degrees Celsius to +75 degrees Celsius
Transient Protection	Input power shall be MOV and fuse protected from line transients.
Fusing	Input power connections shall be fused at 1/2 amp to prevent cabinet wiring damage in the event of an electrical failure.

Specifications for 1881 Card Cage and Harness

Item	Description
Mechanical	Height 5.80" (147.3mm) Length 8.06" (204.7mm) Width 2.90" (73.7mm)
Mounting	The 1881 can sit on mounting feet atop a shelf or can be hung, using the mounting holes in the top flange, under a shelf.
Construction	Anodized aluminum with upper mounting flange and lower mounting feet. Open frame with single 22/44 card edge connector and 60" long controller and detector terminal block cables.

NOTICE: The sale of these items are restricted to state and local governments and to authorized distributors only.