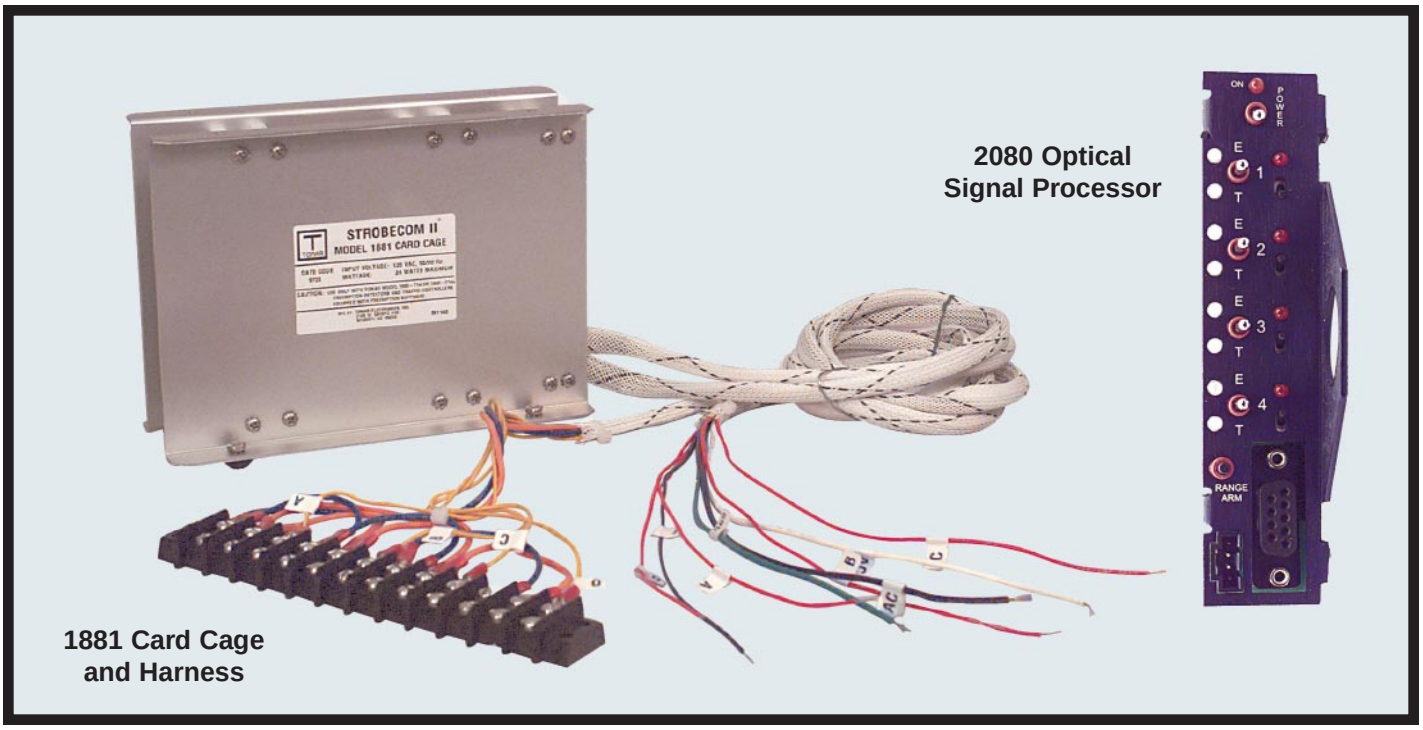
STROBECOM II 2080 OSP CARD AND CARD CAGE



The 2080 Optical Signal Processor (OSP) is TOMAR's mid-range OSP providing the advanced detection and discrimination of all 2000 Series OSP's with improved system security and upgradability. Installed inside the traffic cabinet, the 2080 provides power for 209X Optical Detectors, receives, decodes, and prioritizes signals from the detectors, and optically isolates the preemption channels.

The 2080 is delivered default programmed to respond 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.

Tri-color LED's and test switches on the front panel of the 2080 provide output status indication and diagnostic feedback assisting in troubleshooting and range setting.

The 2080 OSP is compatible with NEMA TS-1, TS-2, and CA/NY 170 controllers and meets all NEMA and CalTrans environmental requirements. The 2080 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 2080 Optical Signal Processor offers the following features:

- **Modular construction** allows tool-less field repair and firmware upgrades. Competitive products using surface mount technology must be returned to the factory for proper repair.
- **Plug and Play firmware** allows the adding of preemption channels or other accessories in the field without manual configuration. You 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 energy. Only TOMAR's advanced, digital signal processing can eliminate this troublesome side effect making system installation and set up far less critical.
- **Full upgradability to 2140 OSP** insures that you can start your Strobecom II system inexpensively and add all the logging and communication capability of the 2140 OSP later.
- **Expansion port** for easy connection of the 2080 to other accessory modules like green phase monitors, confirmation light drivers, and external preemption adapters for controllers that do not have internal preemption software.
- **Preemption channel disconnect switches** allow the preemption outputs from the 2080 to be physically disconnected from the controller inputs during setup and test. Traffic technicians can perform all system setup without disrupting traffic flow with system tests.
- **True 10-year warranty** covers the 2080 and all Strobecom II components. Unlike other manufacturers, TOMAR's 10-year warranty has NO fees or charges for warranty repairs after 5 years.

EXTENDED 10 YEAR WARRANTY!

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2080 Optical Signal Processor Card Specifications

Signal Coding:	The 2080 shall be capable of receiving, decoding, and prioritizing the Emergency and Transit signals transmitted by TOMAR 2060 identifying emitters. The 2080 shall be configurable via a jumper on the control module, to accept or reject older non-identifying optical signals.
Signal Acquisition Time:	Typical signal acquisition time shall be approximately 2.5 seconds. Acquisition time will vary depending upon the number of identification codes present simultaneously and on the density of optical noise.
Simultaneous Signals:	Each signal processor module shall be capable of receiving and decoding up to 10 coded signals simultaneously. Additional simultaneous signals will be ignored.
Range:	2500 feet maximum adjustable down to 300 feet in 255 steps for each signal band.
Range Adjustment:	Range adjustment shall be accomplished via front panel switches and emitter.
Maximum Number of Codes:	The 2080 shall respond to any of the 65,000 unique identification codes available in each signal band.
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 2080 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 code should that code remain within range for more than 5 minutes. Once the emitter is shut off for 5 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.

1881 Card Cage and Harness - Specifications

MECHANICAL

Size: Height - 5.80" (147.3 mm)
Length - 8.06" (204.7 mm)
Width - 2.90" (73.7 mm)

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.

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