



4080V2W-4

4080 Version 2, four channel, wide panel, optical signal processor with Integrated Confirmation



- **INTEGRATED CONFIRMATION** technology powers IC enabled 4000 series TOMAR Strobecom II detectors to be powered and controlled over the standard preemption detector cable. No additional power supplies, mounting, programming, or wiring required.
- **TRUE CONFIRMATION**, when combined with INTEGRATED CONFIRMATION is the only preemption system that provides real, closed-loop, visual feedback to vehicle drivers that the intersection is in preempt
- **Active Reflection Suppression** prevents cross street preemption due to reflected emitter energy. TOMAR's advanced digital signal processing eliminates this troublesome side effect making detector installation and setup far less critical.
- **PLUG-and-PLAY** firmware allows the addition of detectors and other accessories to the system without manual configuration. Buy only the equipment needed today and add more capability later saving precious funds.
- **Expansion Port** provides easy connection of the 4080V2W-4 to other accessory modules

Installed inside the traffic cabinet, the 4080V2W-4 wide panel, optical signal processor provides power for 4000 series optical detectors, receives, decodes, and prioritizes emitter signals from the detectors, and powers and activates Integrated Confirmation lights.

Equipped with TOMAR's patented (US patent 8,742,946) INTEGRATED CONFIRMATION technology, the 4080V2W-4 powers and controls the high intensity LED confirmation lights integrated into up to four 4000 series IC enabled detectors over standard preemption detector cable with no additional power supply, mounting, programming, or wiring. Integrated Confirmation equipped intersections provide visual feedback of intersection preemption to vehicle drivers and citizens for enhanced safety. When combined with TOMAR's True Confirmation feature the integrated LED confirmation lights provide real closed-loop visual feedback that the traffic controller is actually in preemption providing enhanced right-of-way.

The 4080V2W-4 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 vehicle 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. Up to 65,000 vehicles in each signal band can be individually identified and responded to.

The 4080V2W-4 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 4080V2W-4 plugs directly into standard preemption card slots and does not use internal 24VDC cabinet power.



Specifications

Item	Description
Signal	The 4080V2W-4 shall be capable of receiving, decoding, and prioritizing the Emergency band and Transit band signals transmitted by all TOMAR and competitive emitters. The 4080V2W-4 shall be jumper configurable to accept or reject older non-identifying optical signals. Up to 65,000 vehicles in each signal band shall be individually identifiable.
Signal Acquisition Time	Typical signal acquisition time shall be approximately 2.5 seconds. Acquisition time will vary depending on the number of signals present simultaneously and on the density of optical noise.
Range	Up to 2500 feet of detection or more that can be adjusted down to 200 feet.
Priority Determination	The 4080V2W-4 shall be delivered with default priority grouping, responding on a first-come, first-served basis to signals within each signal band. Signals in the Emergency signal band shall be given priority over signals in the transit signal band. Using configuration jumpers, the user can enable or disable certain signal types, modify transit priority, configure the confirmation light patterns, and enable or disable True Confirmation operations.
Output Signals	The 4080V2W-4 shall provide four optically-isolated output channels for placing NEMA standard signal level calls on traffic controller preempt inputs.
Input Signals	The 4080V2W-4 shall have four optically-isolated inputs for connecting to traffic controller preempt status outputs.
Confirmation Lights	The 4080V2W-4 shall be capable of powering and operating up to four TOMAR 4000 series Integrated Confirmation enabled detectors over up to 600' of preempt detector cable per IC enabled detector.
Maximum Detectors	Up to four 4000 series IC enabled detectors (maximum of four LED confirmation lights total) plus four additional non-IC enabled detectors
Electrical Requirements	120/240VAC 50/60Hz
Temperature Range	-40 to +75 degrees C
Transient Protection	Input power shall be MOV protected from AC mains transients. Detector inputs shall be TVS protected from electrical transients.
Fusing	A ½ amp fuse shall be included in the input power connection to protect cabinet wiring

Ordering Info

Catalog Number	Description
4080V2W-4	Four channel wide panel Optical Signal Processor with INTEGRATED CONFIRMATION

TRUE 10 YEAR WARRANTY!

10 year warranty covers the 4000 Series and all STROBECOM II components. Unlike other manufacturers, TOMAR's ten year warranty has NO fees or charges for warranty repairs after five years.

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