



## Wireless On/Off Control

COMPAK I/O 8, I/O 8M, I/O 8P





## Simple, powerful, wireless on/off control systems

ENCOM's contact closure products are saving lives and property by providing simple, rugged and reliable wireless on/off control for public safety and industrial applications.

ENCOM's COMMPAK I/O system uses state-of-the-art 900 MHz frequency-hopping, spread-spectrum technology to provide bulletproof wireless communications, operating in mission critical applications and preventing traffic accidents when employed in such settings as commercial vehicle inspection stations, traffic signal pre-emption systems and school-zone flashing beacon systems.

These easy-to-use units integrate with numerous applications, adding agility and flexibility to existing systems. With infinite routing possibilities, remote operation and exact diagnostics, COMMPAK I/O units ensure effective, dependable operation for a host of applications, without the installation costs and time constraints of wired systems.

New to ENCOM's family of contact closure products is the Web I/O, an Ethernet-based device that provides flexible central control and monitoring capabilities for solar-powered and 120 VAC-powered flashing beacon systems. The Web I/O can be connected anywhere on a private IP network or GSM/GPRS cellular modem, allowing instant control of beacon systems, including school-zone flashing beacons and highway warning signals.

Simple to integrate, the COMMPAK I/O series supports all typical system designs, including point to point, point to multipoint, and multipoint to multipoint. Innovative timer outputs can be pre-programmed for up to two hours, eliminating the need for timer relays and reducing costs.

Each unit is built and supported with ENCOM's 20-plus years of industry experience, and includes a five-year warranty, and comes with powerful, user-friendly ControlPAK software. This Windows®-based program includes highly visual, straightforward tools for configuration, remote maintenance and diagnostics. Also included is a spectrum analyzer, for determining precise noise levels and optimal operating frequencies.

## Available in Four Configurations



**COMMPAK I/O 8** A contact closure radio with eight inputs and eight outputs, providing robust on/off control and monitoring of multiple events within a 20-mile range. A flexible shelf-mounted unit that covers a broad range of applications.



**COMMPAK I/O 8M** A contact closure master activation unit, available on one-push-button or eight-push-button models, which controls COMMPAK I/O 8 radios in long-range operation (up to 20 miles line of sight). Applications include fire hall warning signals and weigh station signs.



**COMMPAK I/O 8P** A contact-closure radio with all-inclusive, weatherproof housing for pole-mount assembly. Applications include sites without existing cabinets and solar-powered applications.



**Web I/O** The all-new Web I/O is an Ethernet-based device that combines a web server with a powerful 900 MHz ENCOM radio to provide simple and versatile wide-area control of up to 255 remote units within a 20-mile radius. Combines with ZoneWatch software for a powerful Web-based control system.

## Applications

- Advance traffic warning systems
- Emergency vehicle pre-emption
- Gate open and closure
- Airfield lighting
- Remote irrigation systems
- School-zone flashing beacons
- Emergency warning systems
- Remote vehicle detection
- Traffic ramp metering



## ENCOM's COMPAK I/O contact closure transceivers are . . .

### ADAPTABLE

- Easy to install
- 8 inputs and outputs (I/O 8)
- Software programmable I/O routing
- Each unit can be master, repeater and remote
- Multiple repeater levels supported for extending communications
- Low-voltage input port accepts toggle switch, TTL, CMOS, or 0 to 24V (ground active)

### INTELLIGENT

- Low power consumption for solar-powered applications
- Bi-directional communication for easy confirmation
- Software selectable system configuration
- Complete remote management

### DEPENDABLE

- Low latency for detection applications
- Robust on/off control and monitoring of remote events
- Long-range operation (up to 20 miles line of sight)
- Rugged NEMA-compliant weatherproof enclosures (I/O 8P)
- Failsafe options to monitor link status for mission-critical applications
- Five Year Warranty

### About ENCOM Wireless:

ENCOM, based in Calgary, Canada, provides field proven, cost-effective wireless data solutions for municipal and industrial clients, with applications in the areas of:

- Intelligent transportation systems
- Public safety communications
- Municipal corporate security and IT networks
- Water and waste water management
- Electrical utilities
- Oil and gas



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#### RADIO SPECIFICATIONS

<b>Technology</b>	Frequency-hopping, spread-spectrum technology (FHSS)
<b>Frequency Range</b>	902-928 MHz
<b>Output Power</b>	1mW, 10mW, 100mW, 1000mW
<b>Software Programmable</b>	Yes
<b>Available Hop Patterns</b>	64
<b>Number of RF Channels</b>	128
<b>RF Channel Spacing</b>	200 kHz
<b>Error Checking</b>	16 bit-CRC
<b>Encryption</b>	16 bit
<b>Receiver Sensitivity / ER</b>	-110 dBm @ 10-6 BER
<b>System Gain</b>	145 dBm
<b>Antenna Port</b>	RP TNC-F
<b>Certification</b>	FCC, Industry Canada
<b>Operating Modes</b>	Transceiver
<b>System Configurations</b>	Point-to-point, point-to-multipoint, multipoint-to-point, multipoint-to-multipoint

#### GENERAL SPECIFICATIONS

<b>Input Power</b>	6-30 VDC		
	<b>Normal</b>	<b>Low current mode</b>	<b>Sleep mode</b>
<b>Master</b>	45 mA	9mA	N/A
<b>Repeater</b>	76 mA	9mA	N/A
<b>Remote</b>	45 mA	9mA	7.5 mA
<b>Power Consumption</b>	typical @ 24 VDC		
<b>Operating Environment</b>	-40°F to 76°F (-40°C to 80°C)		
<b>Humidity</b>	0-95% non-condensing		
<b>Dimensions</b>	I/O 8: 4.75"W x 1.73"H x 3.75"D I/O 8M and 8P: 4.5"W x 4.5"H x 2.5"D		
<b>Weight</b>	I/O 8: 20 oz I/O 8M and 8P: 16 oz		
<b>Enclosure Type</b>	I/O 8: Milled aluminum, black powder coat I/O 8M and 8P: UV-stabilized plastic and diecast aluminum, IP67 weatherproof		

#### SOFTWARE SPECIFICATIONS 900 MHz

<b>Radio configuration</b>	Yes
<b>I/O mapping</b>	Yes
<b>Spectrum analyzer</b>	Yes
<b>Remote diagnostics and configuration</b>	Yes

#### INTERFACE SPECIFICATIONS

<b>Programming port</b>	RJ12
<b>Inputs</b>	0-24 VDC (ground activated)
<b>Connector terminal block</b>	8 digital open collector (max 500mA load current per output)

#### INDICATORS

<b>Power</b>	Yes
<b>Input</b>	Yes
<b>Output</b>	Yes
<b>Link</b>	Yes

#### WARRANTY

<b>Five-year warranty</b>	
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