

### Features:

#### Field Configurable

- Reader, I/O to OSDP
- OSDP to Panel

#### Interfaces and Formats

- Wiegand ( 4 to 300 bits)
- F/2F (Binary, ABA)
- Strobed ( Wiegand, ABA )
- Serial (RS-232, RS-485)
- ABA
- BarCode
- Others

#### Secure Channel Communications

- AES-128
- CBC Authentication

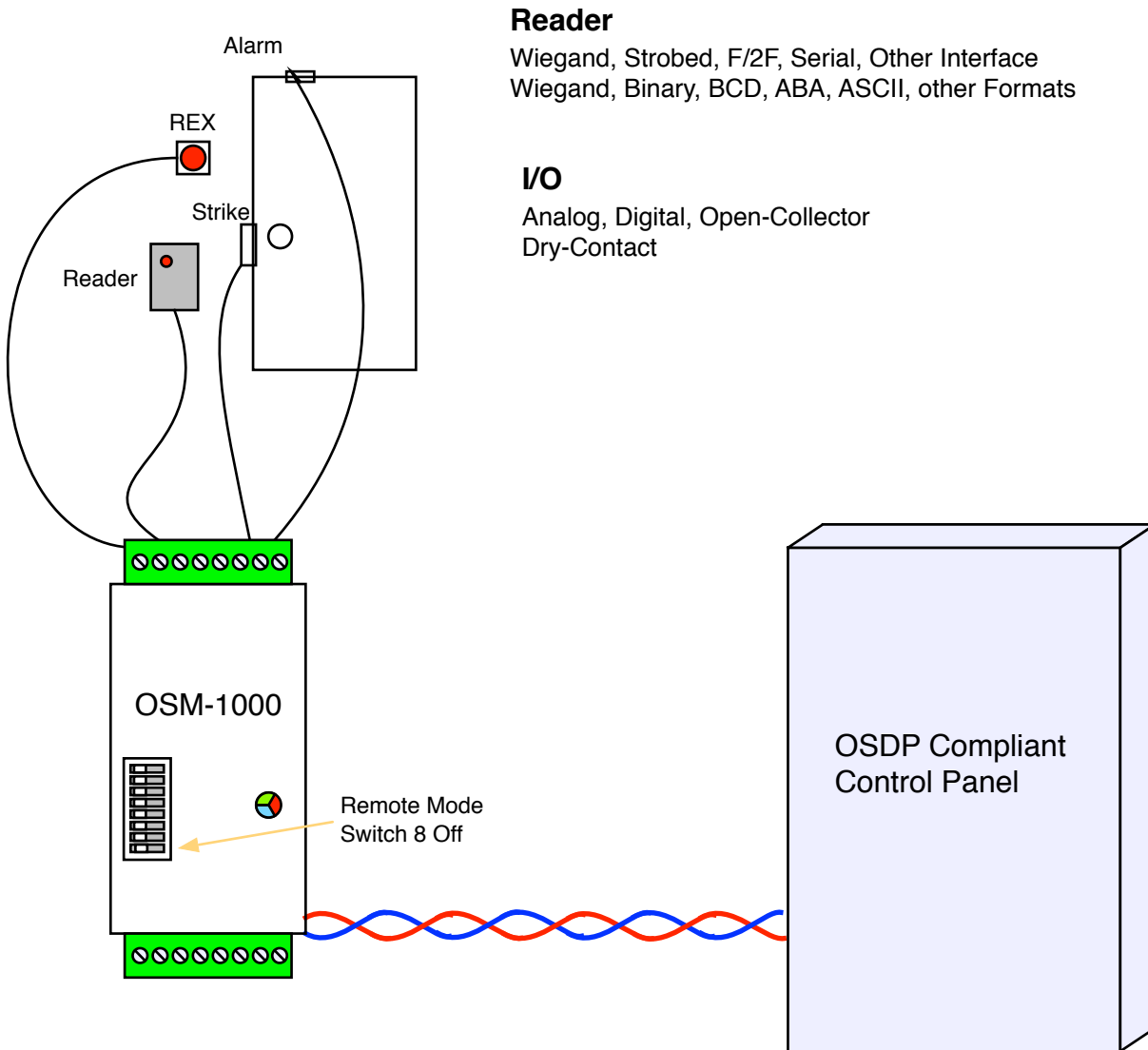


The OSM-1000 is the first in a family of products that are specifically designed to allow legacy card access panels and readers to interface with the SIA - Open Supervised Device Protocol (OSDP). Wiegand, Serial, Strobed, ABA, Bar Code, and other widely used interfaces and formats are re-packaged into an equivalent OSDP packet structure. The OSM-1000 can be field configured to be a reader-side (PD) or panel-side device (CP).

**Reader-Side (PD):** converts legacy card reader interfaces and formats to a 2-wire OSDP protocol to be connected to a compatible access control panel.

**Panel-Side (CP):** converts OSDP readers and other door hardware to legacy Wiegand, MagStripe, Serial, and other panel required formats. Door signals such as REX, alarm, and strike are converted to simple relay, digital, or analog equivalents.

## Reader-Side Application (PD)

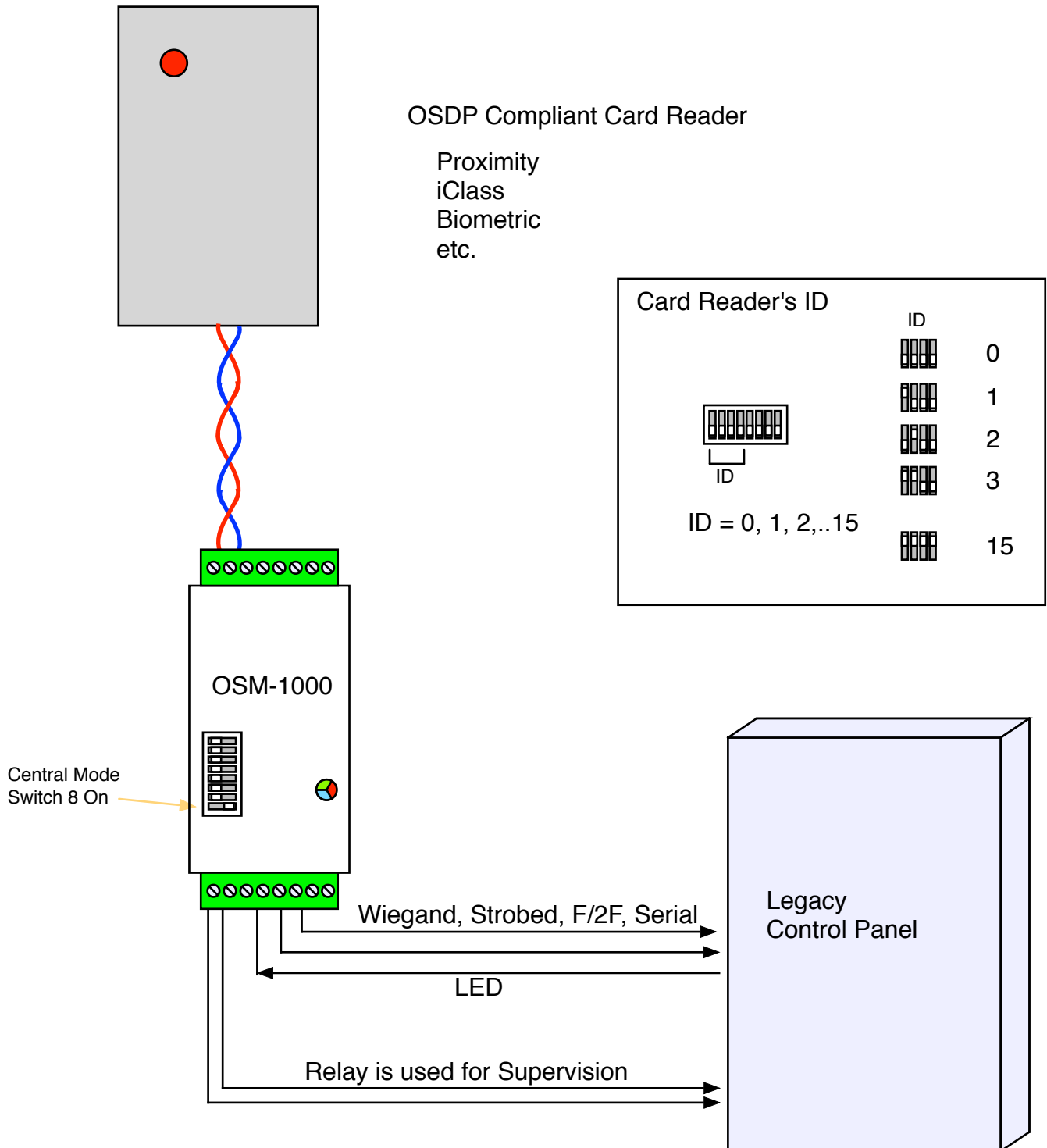


Power for the OSM-1000 can be supplied by the panel on a separate pair or be supplied locally at the door.

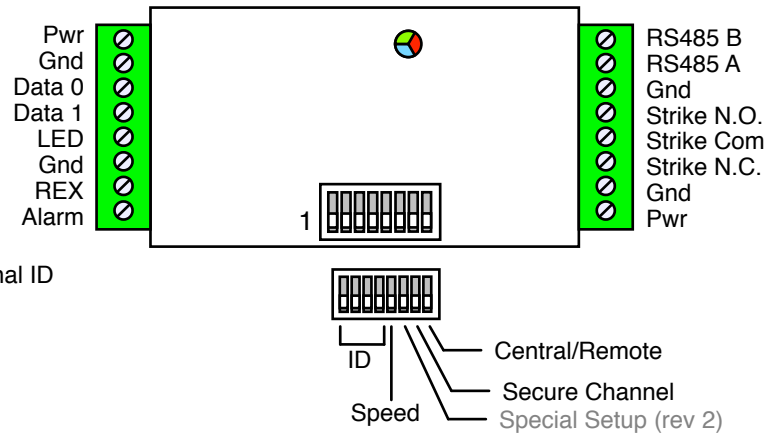
All reader and I/O signals are monitored and controlled by the OSDP compatible control panel.

Set the OSM-1000's polling ID in switches 1 to 4 ( ID 0 to 15). Or use the OSDP configured ID (see page 4).

# Panel-Side Application (CP)



If Secure Channel is used (Sw 7 On), the OSM-1000 will initiate the authentication sequence with the device whose polling ID matches the DIP switch setting (or configured via OSDP *COMSET* command).



**ID** - Override Stored Polling Address {1..15}, 0 = use internal ID

**Speed** - on = 9600, off = use internal speed

**Special Setup** - allow intrinsically safe configuration

**Secure Channel:**

Central - initiate SC Session

Remote - require SC communication only

**Op Mode** - on = Central (CP), off = remote (PD)

**Supply Power:**

7 to 16vdc @ 100ma

**Form C Relay:**

Typical: 1amp @ 30Vdc, 0.3amp @ 125Vac

Max Power: 30W (DC), 37.5VA (AC)

Max Voltage: 110Vdc, 125Vac

**Diagnostic LED (RGB)**

When powered on the LED goes thru a sequence of Red, Blue, Green, White then settles on the mode dictated by switch 8 (PD or CP).

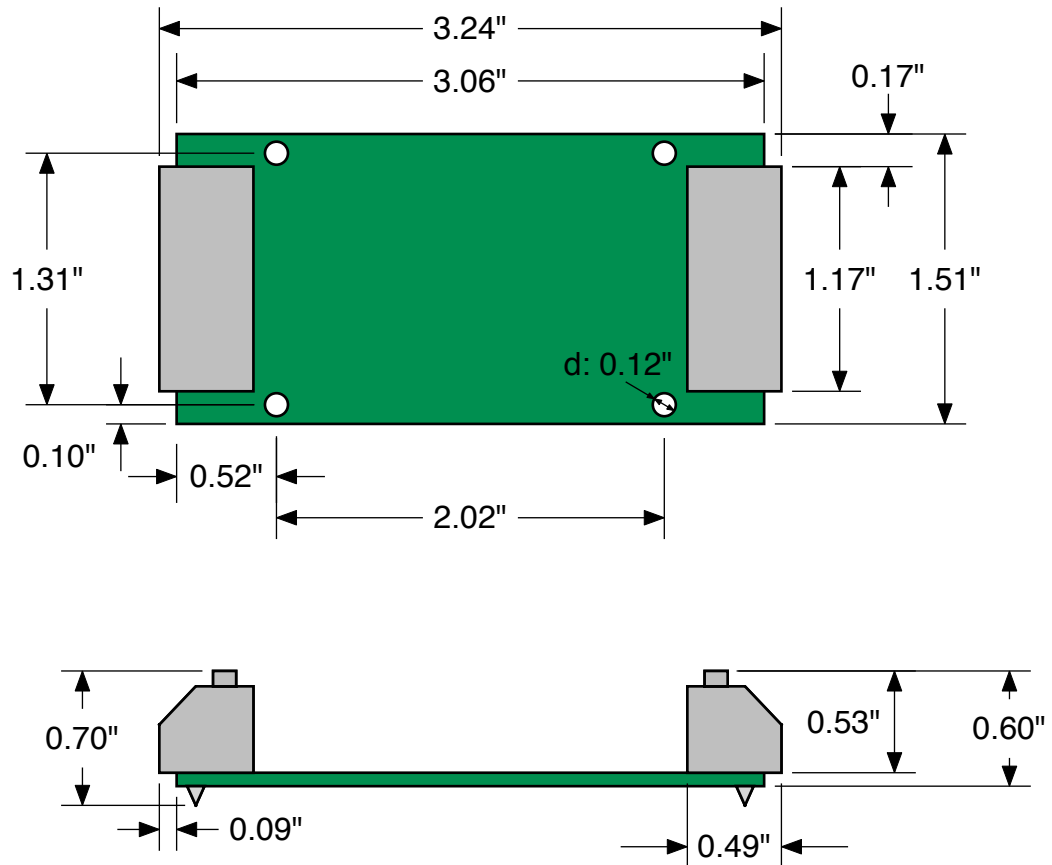
**Remote (PD) Mode**

- undulating Red indicates no communication.
- flickering blue / red ( ) - communication with central unit (CP)
- any solid color indicates fault - reset the unit by removing power for 1 second

**Central (CP) Mode**

- slow flash (1/2 sec intervals) - no response from remote unit (PD).
- flickering blue / red - communication with central unit (PD)
- any solid color indicates fault - reset the unit by removing power for 1 second

## OSM-1000 Mechanical Dimensions



All dimensions are given in inches unless otherwise specified, and tolerances are  $\pm 0.01$ ". Dimensions that are not specified are either symmetric, or derivable.

## OSDP Tools and Information

For more information about the OSM-1000, the Osmium series, or OSDP in general, please visit <http://www.osdp-connect.com/>.

The most up-to-date version of this manual is maintained at <http://www.osdp-connect.com/osmiumtrade-technical-information.html>

Tools for configuring and upgrading Cypress OSDP products, and for testing any OSDP compliant devices, may be found at <http://www.osdp-connect.com/tools.html>