# PEGAsys<sup>™</sup> Addressable Loop Module (PALM)

# For ORION™ XT Detectors

# **SmartOne®**

#### **FEATURES**

- UL Listed
- FM Approved
- CSFM Listed
- NYC MEA Approved MEA
- Allows HSSD<sup>®</sup> to be Connected to an ARIES<sup>™</sup> or PEGAsys<sup>™</sup> Panel as a SmartOne<sup>®</sup> Detector
- Up to 255 PALMs Per Addressable Signaling Line Circuit
- Reports Pre-Alarm, Alarm and Trouble to an ARIES or PEGAsys Panel
- Real Time Monitoring of Smoke Levels From an ARIES or PEGAsys Panel
- Mounted Within ORION™ XT Detector



The PEGAsys™ Addressable Loop Module (PALM) is an intelligent loop device that allows an ORION™ XT High Sensitivity Smoke Detector to be directly connected to an ARIES or PEGAsys Addressable Signaling Line Circuit. The PALM provides increased flexibility in installing high-sensitivity smoke detection, by providing data from the Detector back to the ARIES or PEGAsys fire alarm control panel.

The PEGAsys™ Addressable Loop Module (PALM) sits on the ARIES or PEGAsys Addressable Signaling Line Circuit, among other SmartOne® sensors or modules. Up to 255 addressable devices of any combination, including the PALM, may be connected to the Signaling Line Circuit. One PALM is required for each ORION XT Detector that is to be connected to the ARIES or PEGAsys Signaling Line Circuit.

The PALM transmits pre-alarm, alarm and up to six trouble messages to the ARIES or PEGAsys panel. The PALM is fully supervised and continuously monitors all aspects of the PALM and ORION XT Detector. Using the menu functions of the ARIES or PEGAsys panel, real-time smoke and airflow levels can be transmitted from the PALM and displayed on the panel. In addition, detector sensitivity tests can be performed from commands on the panel.

The PALM is a single circuit board that plugs into a socket on the termination board inside an ORION XT Detector. The easy-to-install PALM "snaps" effortlessly into its mounting hardware and requires no extra hardware to install. After mounting the PALM, only five field wiring connections are needed for the Addressable Signaling Line Circuit and ground. Power is provided to the PALM via the termination board. The installation of one



PALM can be completed within minutes.

Programming of the PALM (including defining the ARIES or PEGAsys loop address) and history downloading are done with a computer, running ORION Configuration Software that is connected directly to the RS-232 port of the Detector.

## **CONTROL PANEL INTERFACE**

The PALM communicates the following detector status information and commands to and from the ARIES or PEGAsys Control Panel:

Alarm and Pre-Alarm Conditions: Communicated to the ARIES or PEGAsys panel when the ORION XT Detector detects smoke above the programmed alarm or pre-alarm thresholds.

Real-time Smoke and Airflow Levels: These levels are accessible through the panel system menus.

<u>Trouble Conditions</u>: Communicated to the ARIES or PEGAsys when the ORION XT Detector detects a trouble. The Detector monitors the detector head, airflow, power supply, detector isolation and address loop continuity for trouble conditions.

<u>Detector Test</u>: Allows the detector sensitivity test to be performed from the ARIES or PEGAsys panel.

# **TECHNICAL SPECIFICATIONS**

**Input Voltage:** 5 Vdc (supplied by termination

board)

Maximum Input 125 mA at 5 Vdc (supplied

**Current:** by termination board)

Adds 20 mA at 24 Vdc to

**Detector current** 

Operating Temperature:

32° to 120°F (0° to 49°C)

Operating Humidity: 10 to 93% RH,

non-condensing

Electrical Connections: 18 to 12 AWG

 $(0.75 \text{ to } 2.5 \text{ mm}^2)$  wiring to

removable terminal block

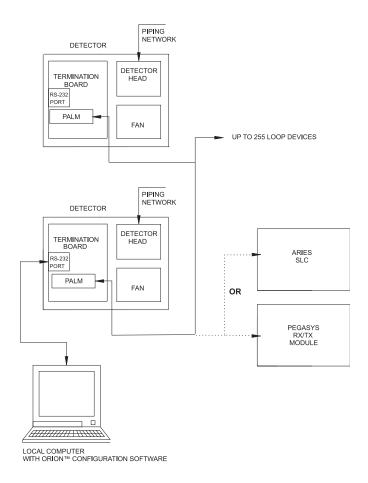
Shipping Weight: 0.3 lb. (0.2 kg)

**Dimensions:** 3-15/16 in. W x 2-11/64 in. H x

1-9/16 in. D (100 mm W x 55

mm H x 40 mm D)

### **PALM BLOCK DIAGRAM**



**Note:** When using a PALM with a PEGAsys panel, ensure that the firmware is 80.0 or later and that the PCS software is Version 8.0 or higher.