

# LPM Online Particle Monitor

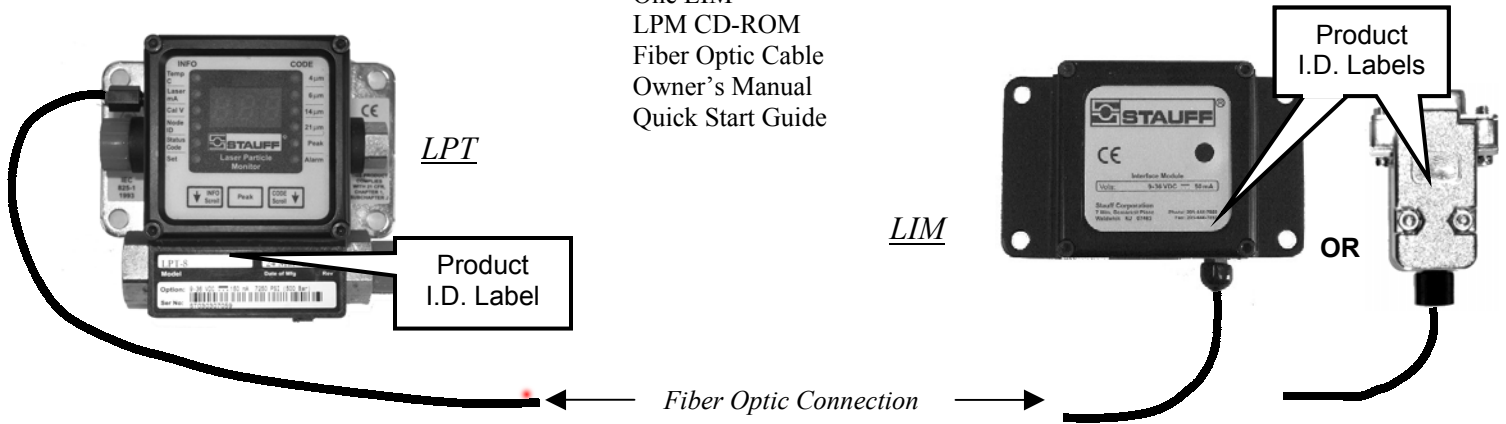
## Quick Start Guide

### ① Identifying Your Product

Refer to Owner's manual "Introduction" section

The LPM1 system is designed to monitor the contamination levels in fluid systems, and it consists of two basic parts: a LPT Particle Transducer and an LIM Interface Module. Your carton should contain (at least) the following:

- One LPT
- One LIM
- LPM CD-ROM
- Fiber Optic Cable
- Owner's Manual
- Quick Start Guide



The LPM monitor contains a laser-based sensor that is a Class 1 product (as defined by 21 CFR, Subchapter J, of the Health and Safety Act of 1968) when used in normal operation. Service should only be performed only by factory-authorized personnel.

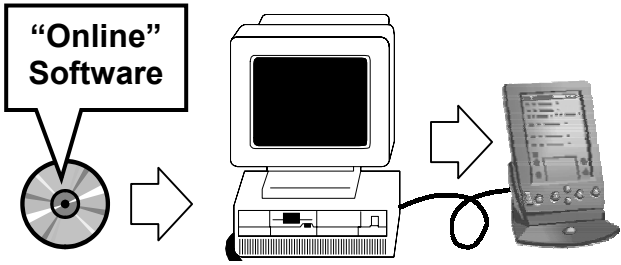
### ② Pre-Installation Programming (Optional)

Refer to Owner's manual "Pre-programming the LPT" section

**A) Install the "Online" software on your PDA**

**AND**

**B) Program the LPT using the PDA**

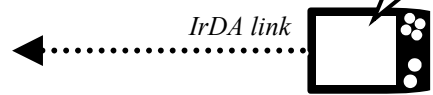


1. Load the "Online" software from the LPM CD-ROM onto your PC
2. Link to your PDA and copy it to the PDA

— LPT CONFIGURATION MENU —

```

1 SYSTEM ID #1 (0-9999)..... 5281
2 SYSTEM ID #2 (0-9999)..... 1247
N NODE ID (1-247)..... 138
M SAMPLE MODE (TIME/EVENT)..... T
O SAMPLE OUTPUT (SINGLE/AVERAGE)..... S
P SAMPLE PERIOD (MM:SS)..... 01:00
H SAMPLE HOLD (MM:SS)..... 04:00
E EVENT LEVEL (0-10000)..... 5000
F OUTPUT FORMAT (RAW/TERMINAL)..... R
Q QUIT
Command ?
    
```



To program the LPT, point the IrDA port on the PDA at the window on the LPT and apply power to the LPT. Enter the configuration mode when prompted. Commonly modified parameters are the N, O, P and H fields. The "Q" (Quit) Command must be used to save new settings, or the LPT will return to default factory settings

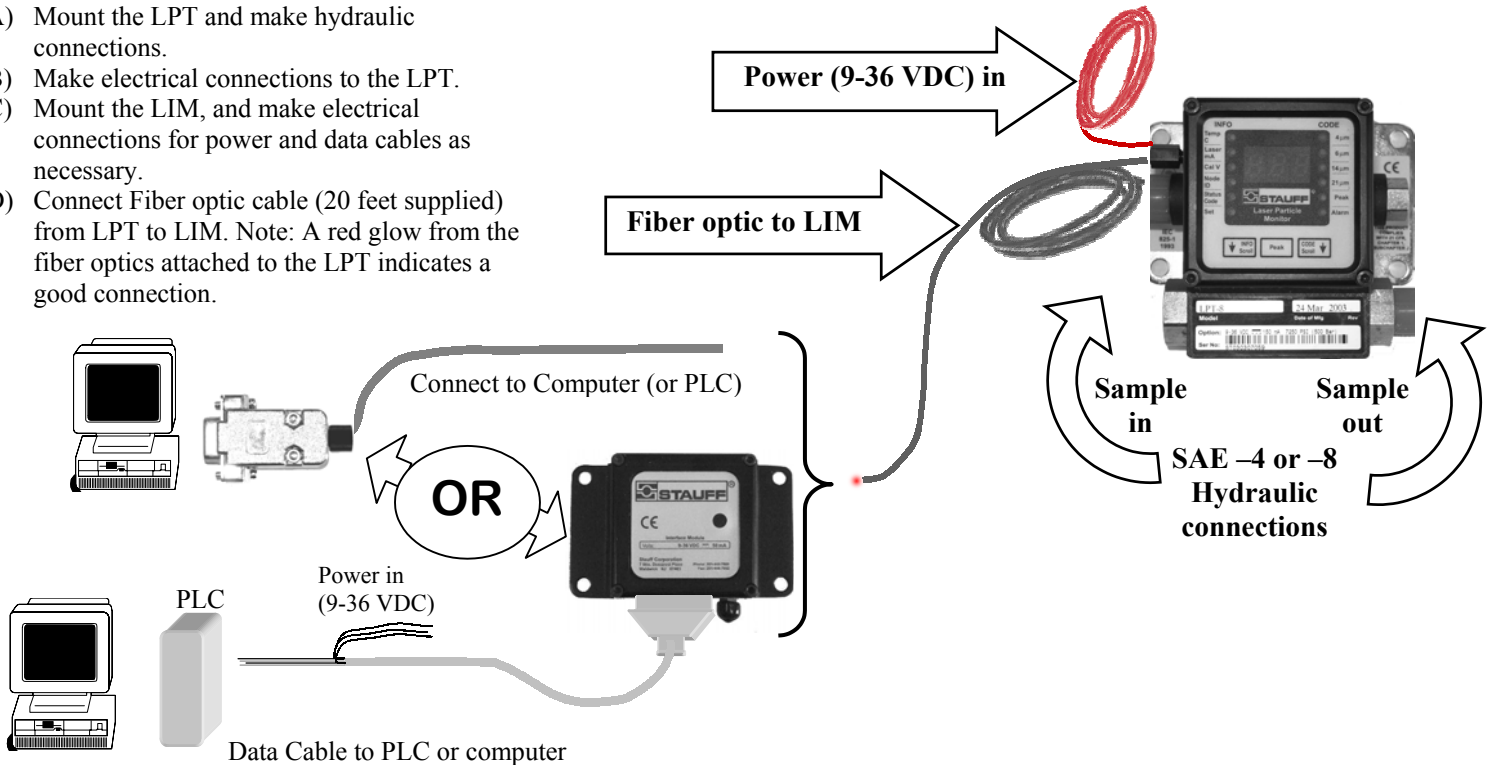
### ③ Hardware Installation



**Follow Standard Safety Precautions**

Refer to Owner's manual "Installation" section

- A) Mount the LPT and make hydraulic connections.
- B) Make electrical connections to the LPT.
- C) Mount the LIM, and make electrical connections for power and data cables as necessary.
- D) Connect Fiber optic cable (20 feet supplied) from LPT to LIM. Note: A red glow from the fiber optics attached to the LPT indicates a good connection.

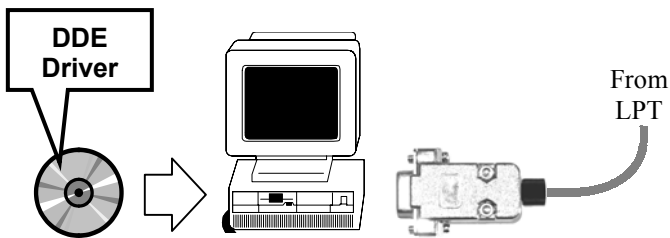


### ④ Data Acquisition

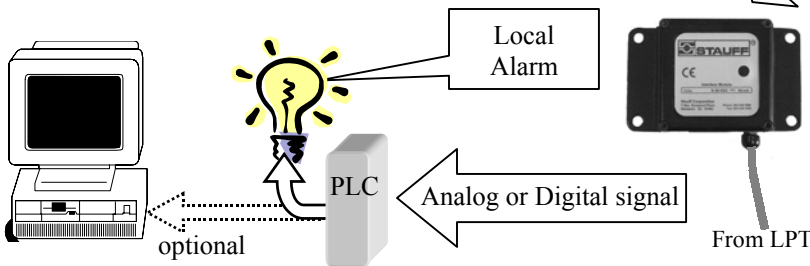
Refer to Owners Manual "Data Acquisition" Section

#### A) Direct Connection to LIM-1

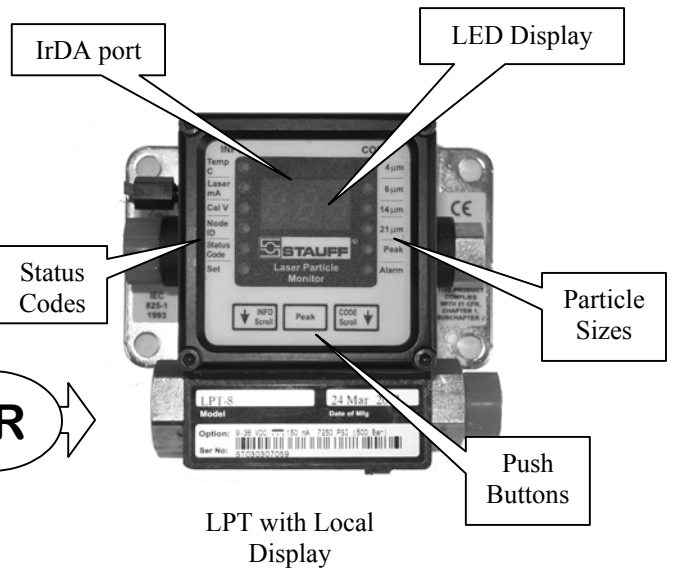
In this system, the LPT streams data to the LIM-1 without being interrogated by an operator.



#### B) Using a PLC with LIM-3



#### C) Local Display and Controls



The LPT-4, -8, or -0 is equipped with a local display, which gives a full view of monitoring results as well as the status of the system.

For full details and operating instructions refer to the Owner's Manual you received with your LPM1.