

CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Materials and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner

MEA 60-02-E Vol. II
Report of Material and Equipment Acceptance Division

Manufacturer – Kidde-Fenwal, Inc.; 400 Main Street, Ashland, MA 01721.

Trade Name – FENWAL.

Product – AnaLASER® II, Ultra High Sensitivity Smoke Detection System.

Pertinent Code Section(s) – Article 6 Section 27-978 through 27-981, Reference Standard RS 17.

Tests – UL UL 268, UL268A and UL 1481.

Laboratory – Underwriters Laboratories Inc.

Test Reports – UL File S1064, Vol. 19, Sec. 1, Project 00NK29213 dated June 28, 2001, revised July 18, 2002.

Description – The AnaLASER II High Sensitivity Smoke Detection (HSSD) system is intended for early warning smoke detection applications such as telecommunication facilities, data processing facilities, museums and warehouses. For use with compatible approved fire alarm controls. One AnaLASER II HSSD system, when connected to a pipe network designed using “SNIFF” software, provides coverage for an area up to 20,000 sq. ft.

The AnaLASER II HSSD system consists of: an air sampling pipe network, a laser based high sensitivity standard detector (with a dynamic sensitivity range of 0.00075% to 0.3%/ft obscuration) and a high efficiency fan. For cleanroom applications where the environment must be virtually free of air particulate, the ULTRA detector (with a dynamic sensitivity range of 0.00015% to 0.03%/ft obscuration) may be used in place of the standard detector. The Self-Contained Power Supply provides 24 VDC power for one detector from 120/240 VAC. The Multi-Zone Power Supply provides 24 VDC power for up to eight detectors from 120/240 VAC. The 48VDC Power Converters convert 48VDC from an uninterruptible power system to 24VDC for up to eight detectors.

The optional user interface Display Module provides visual indication of the detector's alarm and trouble status on a LCD screen. It can be mounted either within the detector or remotely and communicates via an RS-485 connection.

The Intelligent Interface Module (IIM) provides a communication link to network up to 127 AnaLASER II detectors and report alarms, troubles, etc. Their status changes can be reported to either: a local PC monitoring station UL Listed for Electronic Data Processing (EDP) equipment via an RS-232 port, a remote PC monitoring station UL Listed for Electronic Data Processing (EDP) equipment via a standard voice telephone line utilizing its on-board modem, or to a FenwalNET 2000 Control Panel via an RS-232 port. The PC monitoring station shall be running the LaserNET software and a remote station must also be equipped with a modem.

The AnaLASER Interface Module (AIM) provides an addressable interface for an AnaLASER II to connect to the FenwalNET 2000 Control Panel, via a two-wire communication loop.

The High Sensitivity Smoke Detection system is UL Listed as follows:

Model/Part No.	Description
89-300001-001	Standard Detector Assembly
89-300002-001	ULTRA Detector Assembly
89-300006-001	Display Module
89-300008-001	Self Contained Power Supply w/batteries
89-300010-001	AnaLASER Interface Module
89-300012-001	IIM, Stand-Alone w/modem
89-300013-001	IIM, Stand-Alone w/o modem
89-300014-001	IIM, FN-2000 w/modem
89-300015-001	IIM, FN-2000 w/o modem
89-300020-001	Multi-Zone Power Supply w/batteries
89-300020-002	Battery Expansion for Multi-zone Power Supply
89-300025-001	Single 48VDC Power Converter
89-300025-002	Dual 48VDC Power Converter

Pursuant to "Promulgation of the Rules relating to Material and Equipment Application Procedures" dated November 5, 1992, the Bureau of Fire Prevention has no objections letter dated October 23, 2002, F.P. Index 0210034.

Recommendation – That the above be accepted on condition that all uses, configurations, arrangements and functions, electric power for the unit and installations shall comply with the provisions of New York City Building Code, specifically Subchapter 17 and Reference Standards 17-3 and the Electrical Code and the UL Listing. Further, the spacing of the sampling tubes shall be in accordance with the manufacturer's recommendations and on further condition that:

1. This unit shall not be installed as a primary detector unit in areas that the Building Code specially calls for the installation of an ionization and photoelectric smoke detector.
2. Each unit shall be viewed and limited to the operation of a single detector only.
3. The Ana LASER II shall be installed with its own fuse cut out.
4. When installation in a building with a Fire Command Station, all troubles and fire alarms from AnaLASER II unit shall be reported to the main fire command station and the signal shall latch on at the main fire panel until it is manually reset.
5. Every plan and permit application for installation shall be accompanied with a piping layout and network calculation, to verify that the design meets the manufacturer's recommendations with regards to the minimum suction pressure of 0.05 in and the maximum period of 180 sec. transmit time from the furthest sampling port.
6. In order to prevent buildup of moisture and condensation, the sampling tubes shall be installed with a pitch of 1/16 of an inch per linear foot, away from the AnaLASER II unit. Flexible piping or tubing may not be utilized in this installation.
7. The system must be configured with a LCD display module.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitable placed, certifying that the equipment shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance FEBRUARY 11, 2003

Examined by 