MIRION TECHNOLOGIES

Model 7185/7186 LN_2 Gauge/Controller

Features

Models 7185 and 7186

- Digital level display
- High and low alarm setpoints
- Audible and visible alarm
- Alarm relay
- Sensor tailored to cryostat

Model 7186 Only

- High and low control setpoints
- Controlled ac output
- Solenoid valve with captive 3 m (10 ft) cord
- Hoses for fill and vent

Description

The Model 7185 LN_2 Level Gauge provides a digital display of LN_2 level in a Dewar or container along with adjustable low and high level setpoints which initiate audible and visible alarm signals as well as a relay output for remote monitoring. The display shows liquid level from 0-100% of the active sensor length. It can be programmed to read out in inches or centimeters. Sensors are designed, sized, and configured for CANBERRA dipstick and integral cryostats. For portable cryostats refer to the Model 2541 Controller. Consult the factory for applications involving non-CANBERRA cryostats.

The Model 7186 provides the same functions as the 7185. In addition it has adjustable low and high level control setpoints and a relay which provides line voltage to a controlled ac output for operation of a solenoid valve. The control and alarm setpoints are readily adjustable by means of front panel controls. Setpoints are stored in non-volatile memory. This ac outlet is powered from the time the low setpoint is reached until either 1.) the high setpoint is reached or 2.) the user-programmed time-out is reached. The 7186 includes a cryogenic solenoid valve as well as fill and vent hoses. LN_2 supply containers are available from CANBERRA for a complete automatic LN_2 Fill System.

Both models operate on line voltage of 100, 115, 200, or 240 V ac, 50 or 60 Hz, internally selected. This line voltage is provided on the controlled ac outlet.

The 7186 Controller requires a source of LN_2 at a pressure of 34 to 172 kPa gauge (5 to 25 psig). CANBERRA D-160 and D-240 containers or their equivalents are highly recommended. A self-pressurizing withdrawal device (NTD-30/50) with a 30 or 50 liter Dewar can be used but it is not highly recommended because of marginal capacity and pressure for most applications. The liquid quality must be good at the point of consumption. This means there must be no ice in the liquid and that the supply line must not be lossy (causing excess vaporization).

An overflow container may be required if there is no safe place for the discharge of overflow gas and liquid. **WARNING:** Malfunctions can result in the entire contents of supply containers being dumped through the system. CANBERRA takes no responsibility for such accidents. The user is responsible for the installation and for the safety measures that are needed in this application.

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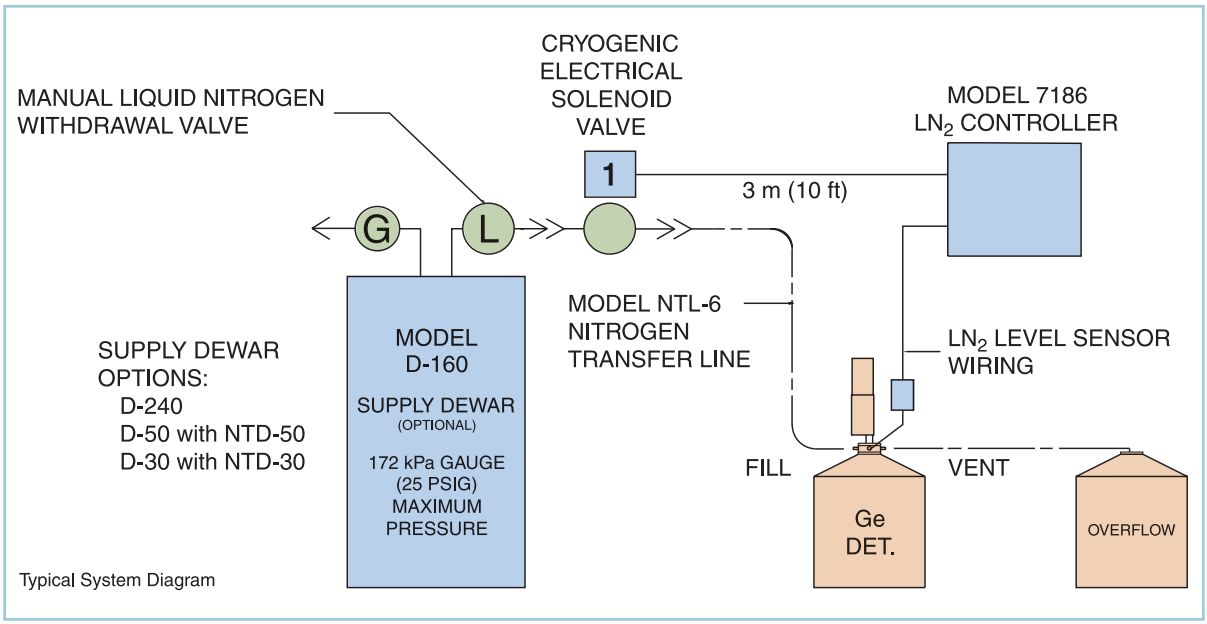
ORDERING INFORMATION

- Specify model number.
- Specify cryostat type and capacity (model number).
- Specify line voltage.
- See LN_2 accessories for options.



Typical System Diagram

ISO 9001 SYSTEM CERTIFIED

CANBERRA