

# SmartLoad BATCH CONTROLLER

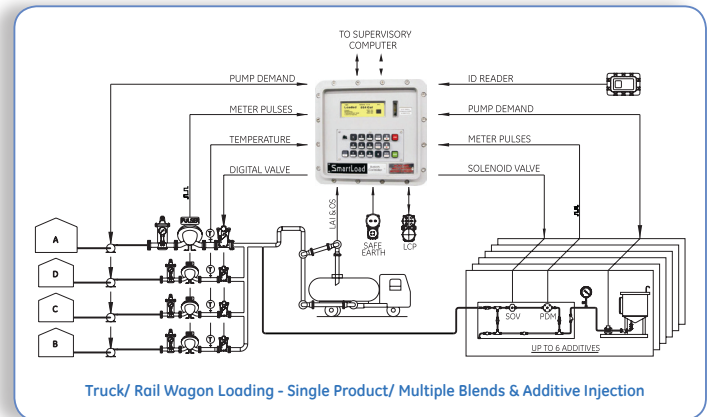
SmartLoad is a batch controller used for liquid product distribution at truck, rail, marine, aviation and pipeline loading and unloading facility. It precisely delivers preset quantity of product blends from tank storage or pipeline into vehicle, rail wagons, aviation or vessels.

## Salient Features

- Incorporates modern technology in a cost-effective, self-contained enclosure providing accuracy and reliability
- Suitable for petroleum, petrochemicals, LNG / LPG, asphalt and specialty chemical applications
- Capable of loading Net LPG quantity deducting vapor quantity
- Controls loading of base or blended product (up to 4 components) with or without additives & dyes (up to 6 additives). Blending can be configured for sequential, in-line proportional or non-proportional mode along with additive injection using various (up to 10) recipes
- User configurable transaction and batch archiving of selected parameters for storage and ticket printing (up to 2000 transactions).
- Configurable data logging / printing options for batch and transaction summary, alarm, meter proving, program mode change, power failure, weights & measures switch status etc.
- User configurable alarm text and alarm actions
- Optional secondary keypad and LCD display available for additional two-side loading or remote control application
- Temperature / Pressure compensation per API IP or linear methods
- Operates as a standalone unit or integrated with any Terminal Automation System
- User-friendly menu driven configuration facility
- Low installation and wiring cost

## Technology

- Big hall-effect keys with user-friendly and cellular phone like alpha-numeric keypad for easy operation
- Large easy to read text/graphical display with automatic backlight and contrast adjustment
- Display of preset and loaded quantity with engineering units
- Dynamic, simultaneous display over 200 data items for providing real-time display of flow rate, temperature, blend percentage, additive volumes, pressure, density etc.



- Communication ports – One RS485 and the other port either with RS232 or RS485 for communication with TAS / other smart devices
- Supports open communication protocol – Modbus-RTU
- Directly interfaces with proximity or touch key card readers
- Directly interfaces with flow meters, digital control valves, additive injector panels, safety interlocks and Remote Interaction Terminal (RIT)

## Safety and Security

- Supports storage up to 500 proximity cards / touch keys that will be validated during manual mode of operation
- Possible to seal weights & measures switch to restrict the change of meter factors/ K-factor
- Audit logs for change in weights & measures parameters, if weights & measures switch is not locked
- Three levels of passwords:
  - L1 – Super User (Can change all the parameters except W&M parameters if locked)
  - L2 – Intermediate (Can only view all parameters)
  - L3 – Operator (Only acknowledge the alarms)

## Accuracy

- Pulse security as per IP252/76, Level B
- 6 points meter factor linearization for increased accuracy



## General Specifications

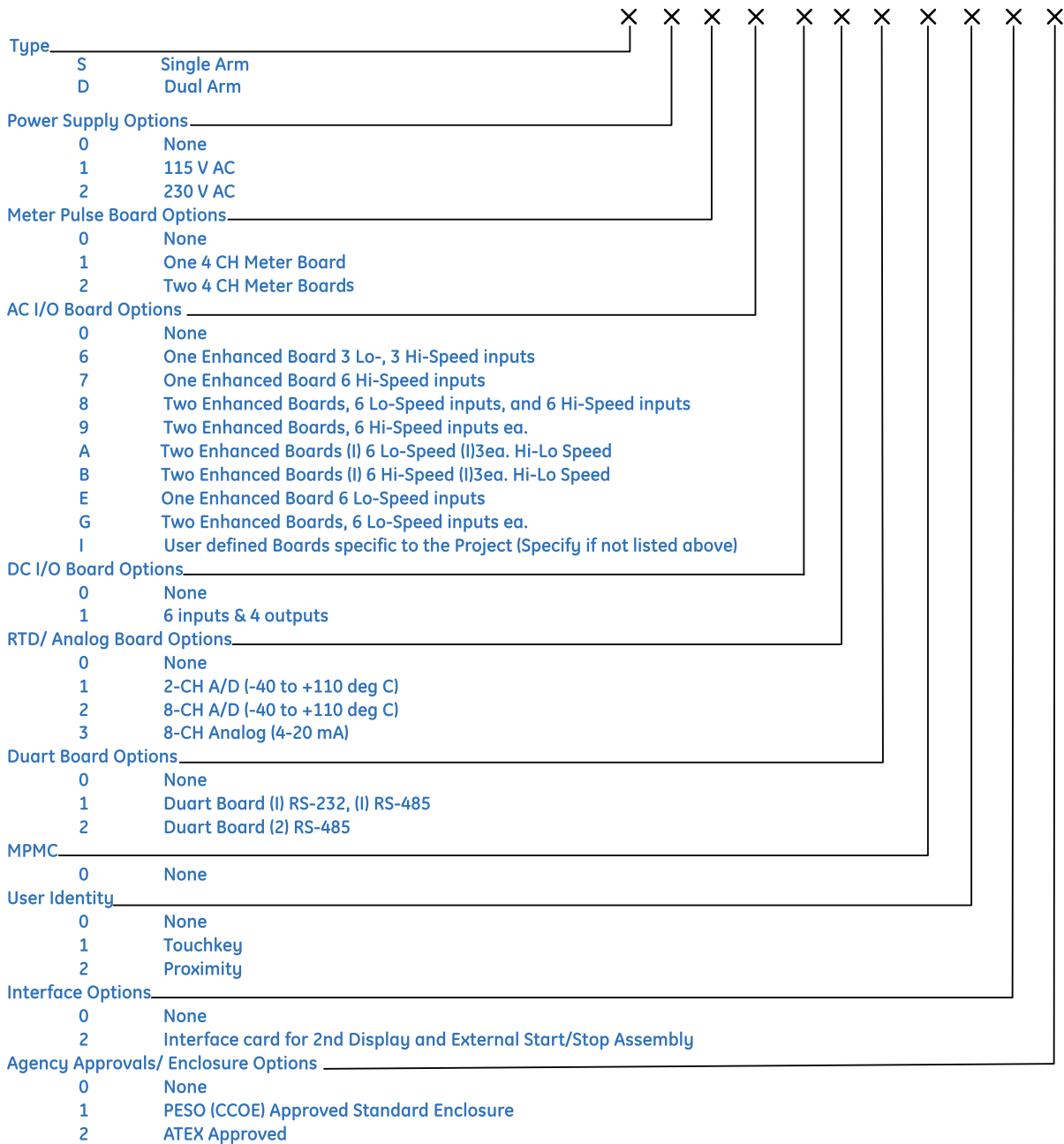
- Operating temperatures : - 4°F to 140°F (-20°C to 60°C)
- Storage temperatures : - 4°F to 158°F (-20°C to 70°C)
- Relative humidity : 5 to 95% non-condensing

## Enclosure Specifications

- (H) 325mm x (W) 356mm x (D) 355mm (+/- 5 mm)
- Weight approximately 25Kg

- Power requirements 115 V AC / 230 V  $\pm$  10% AC, 28 VA
- Five cable entries - bottom entries, forward & rear
- Exd IIB T6 IP65 as per IS/IEC 60079-0:2004, IS/IEC 60079-1:2007 & IS/IEC 60529:2001
- Approvals : CMRI & CCOE - Approved / ATEX & IEC Ex (Applied)
- Weights & measures approval: Weights & measure approved by Department of Consumer Affairs, Government of India Mark # IND/09/11/548

# Model # SmartLoad



imagination at work

## GE Oil & Gas Measurement & Control

Advanced Sys-tek Pvt. Ltd.  
299-300, G.I.D.C., Makarpura,  
Vadodara - 390 010, India  
Ph.: + 91 265 3041100

sales@advancedsystem.com • www.ge-mcs.com