

LDM 88.1

Load cell digitizing module - System 80®

The Load cell Digitizing Module for the System80 is a complete weighing process controller for precise weighing, dozing or filling. The LDM provides high speed digitizing, filtering and computing of a load cell signal for further processing.

A built in PLC with four inputs and four outputs is included.

With CGM 85.1, EGM 87.1 or PGM 86.1 it provides standard gateways to external controllers.

- Complete weighing process controller for high speed dozing, check weighing or filling of liquid fluids.
- A selection of task specific programmes is available.
- Monitoring and downloading of all control parameters via the system Gateway.
- Four isolated logical bi-directional (AC) outputs.
- Four isolated logical inputs.
- Up to triple filling slopes and automatic process trimming.
- High speed A/D conversion and advanced digital filtering.
- Innovative fine filling cut off sequence for narrow standard deviation.
- High resolution input permit much oversized load cells.
- Advanced PC programme for analyzing and correcting the cycle parameters.
- Visual indication by LED's for the logic I/O status, power and the local bus activity
- Makes System 80 scalable and low cost
- Up til 64 nodes (LDM's) in System 80.



LDU 78.1 Qualities

Combine up to 64 LDM's in System 80 to control 64 load cells.

Mounted on one of the mainboard (MB 89) it can be combined with a gateway module. Use the CGM 85.1 for a CAN-bus with the CAN-open standard. Use the EGM 87.1 for Ethernet. Use PGM 86.1 to get a Profi-bus gateway.

The System 80 includes three utilities to help you test the functionality on the gateways for testing the Can-bus use the CANopen monitor, use the MODbus/TCP monitor to test ethernet gateways and to test on Profi you can use the Profi-bus monitor. These gateways makes system 80 a multiple interface weighing process system.

Data for the LDM unit:

18 bit (262000 counts) input signal resolution, 50 nV/count, 2400A/D conversions/sec.

Advanced analog and digital filters offer FIR or IIR performance, both to be set in 8 LP frequency steps and up to 100db/dec.

Device output update rate of 600 upd./sec (IIR) followed by an averaging filter to be set from 600 to 0,6 upd./sec.

Can drive 80 ohm load cells, e.g. 4 pc, each 350 ohm, at 5 Vdc.

A time frame for automatic operations can be defined by way of quad logic inputs for position sensors or valve feed back. Dual logic outputs provide external control of actuators etc. or for internal computing. All set up parameters are available. Signal conditioning, zero and tare operations convert the load cell output into the calibrated units (g; kg; lbs; etc.), as requested.

EMC compliance and surge protection are provided by shielding and T-filters at all pins.

The secured I/Os and protected power input withstand excessive actions. Power supply range is 12-24 Vdc.

Certified to meet the EN45.501 requirements