

# FMS 2000

## level gauge console

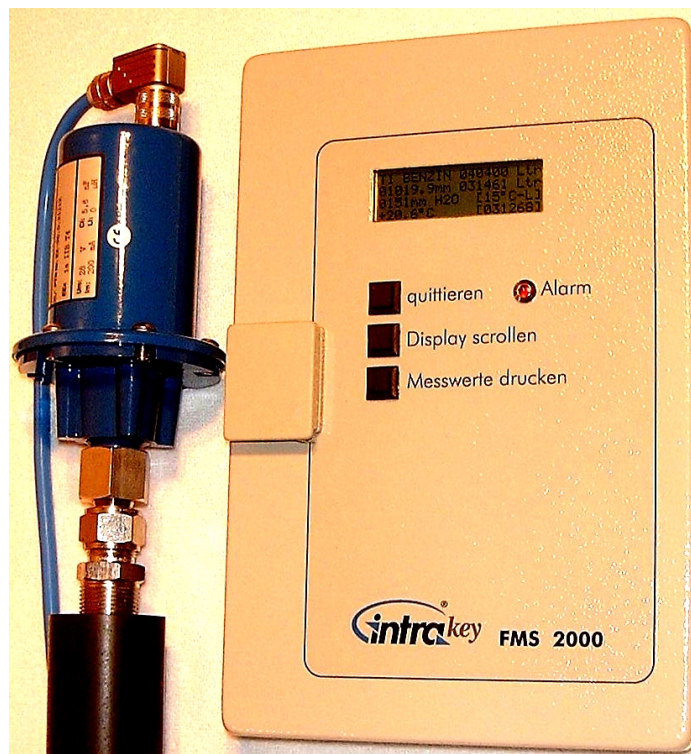
---

The console FMS 2000 is a efficient and inexpensive evaluation unit to connect up to 8 liquid level sensors MTS Level Plus-USTD. Both components constitutes a compact system for measuring of liquid levels in tanks.

Continuous digital data capture und data transmission guarantees highest accuracy and repeatability of the measuring values. The system don't need maintenance.

By flexible possibilities to forward the datas FMS 2000 is integratable into existing systems. Alternatively a stand-alone operation with evaluation at a printer or the connection with the IntraKey-software are possible.

- setting parameters and calibration with PC-software service tool
- reading of actual values, value memory and total counter with PC or alternatively output by printer
- graphic screen of tank volumes with PC-software
- monitoring and indication of critical values (overflow, high level, low level, water, leak)
- display of product level and volume, TC-volume, interface level, temperature and critical value messages
- daily/weekly counters for fillings and drawings
- revision proof circle memory for measuring values and system messages
- updateable firmware for customize applications
- compatibility to existing systems by Enraf H-protocol
- expandable for large systems (8, 16, 24, ... tanks)



### type FMS 1000:

gauge console without control and display elements, reading datas by a PC or modem respectively for connecting to a cash system or a petrol station controller and others

### type FMS 2000:

same as type FMS 1000 but additional LCD-display for measuring values and messages of critical values, 3 buttons to choose different functions and connector for a serial printer

# FMS 2000

## level gauge console

---

### technical datas

#### accuracy of measuring:

- 0.1 mm for product level
- 1 mm for interface (water) level
- 1 Liter for product volume
- 0.1°C for average temperature

#### casing:

- IP 65 – metal box for wall mounting, size: BxHxD: 200 x 300 x 120 mm
- case is lockable and sealable for oaked systems

#### power supply:

- input 85 ... 264 V AC / 47...53 Hz, approx. 30 VA power consumption

#### controller board:

- flash-updateable  $\mu$ Controller with integrated hardware monitoring
- switchable serial interface RS232 (or RS485 for long cable distance):
  - to PC or modem (IntraKey-protocol) or
  - to a serial printer (9600 baud 8N1 DTR-handshake, 40 chars/line) or
  - to a petrol station controller or a cash system with standard Enraf-Nonius-GPU-protocol (9600 baud 7O1 or 1200 baud 8N1 or others)
- electrical isolated RS485 interface to the probes, protected by build-in safety barriers
- status- and diagnosis-LED's for service friendly installation and maintenance
- 5 relays (for 24 V DC, 2 A) for indication of critical values (option)

#### control elements (only type FMS 2000):

- back lighted LCD-display, 4 lines each with 20 characters
- button to acknowledge critical values (switching off the acoustic signal)
- button to scroll the display to the next tank
- button to print the current measuring values and parameters of all tanks
- red LED and acoustic signal to indicate critical values

#### performance:

- permanent polling of the probes (product and water level, temperature)
  - immediate availability of measuring values, of volume, of temperature-compensated volume and the parameters of each tank
  - height-offset (-99 ... +99 mm) for adjustment of the build-in depth of the probe
  - by software free choosable display text
  - calibrateable height-volume-schedule for each tank (up to max. 18 m tank height)
  - circle memory for 160 values with automatically storage at different time intervals
  - circle memory for 100 messages, for example loss of power, leaks, daily reports etc.
  - 8 daily counters for each tank for all fillings and drawings from today and the last 7 days
  - total counter for each tank for all fillings and drawings since start of the system
  - expandable (8, 16, 24, ... tanks) in combination with the petrol station software IntraKey-C/3
-