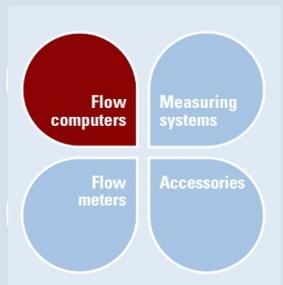# SATAM
A Guidant Measurement Company

Flow calculator for on-board counting

SMART AC30

The SMART AC30 is a latest generation flow calculator for on-board metering groups on tankers and aviation refueling vehicles. It meets all the safety and precision requirements imposed on fuel transport vehicles. The SMART AC30 is compatible with our entire range of volumetric meters ranging from 1.2m3/h to 330m3/h.

Flow computers | Measuring systems
Flow meters | Accessories

Field of application

- Fuel delivery by tanker truck
- Aircraft refueling by tanker and oleo server
- Cabin and fuel dispenser

Operating principle

The SMART AC30 is inspired by the counting principle of the first generation AC30 (certified pulse transmitter and proven for over 15 years) supplemented by an electronic processor allowing the integration of calculation, backup and communication, all in a minimal footprint.
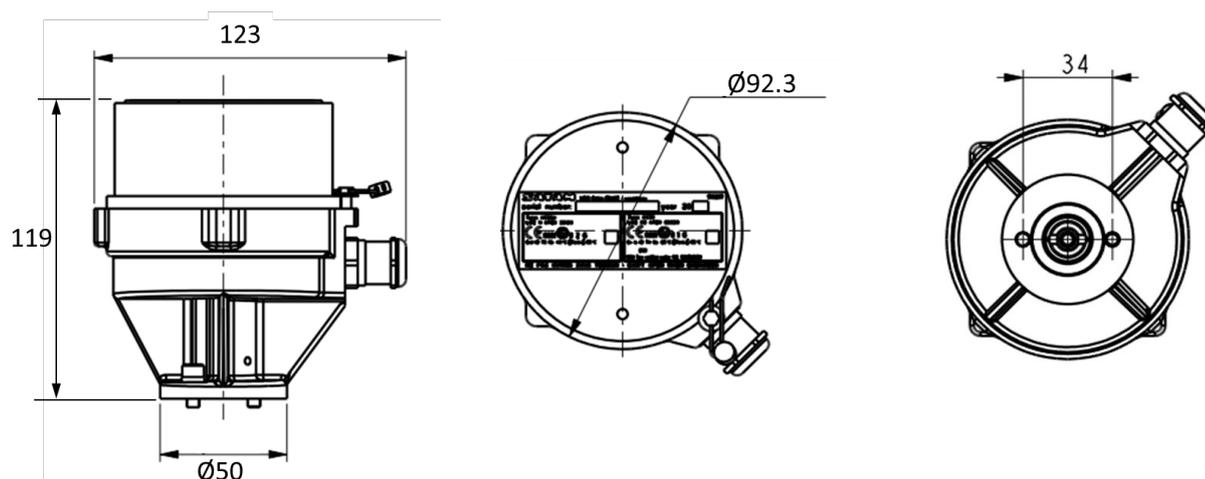
Key points

- Calculation of volume and instantaneous flow
- Calculation and saving of the general and daily totalizer
- Large transaction backup capacity (>32000 in flash memory)
- Timestamps of transactions and events
- 100% French design and manufacturing, on the FALAISE site (Calvados)
- Reduced size: 120 x 92 mm for less than 1Kg
- Simplicity of installation: a 4-wire cable for power and communication

- Explosion-proof housing for maximum robustness
- Reduced installation and maintenance cost thanks to an optimized design
- Counting precision: proven technology
- Gauging of the measuring system simplified thanks to on-board software
- Archiving of events and operating states
- Communication via CAN or MODBUS RS485 industrial network
- Possibility of master/slave operation for multi-meter vehicle
- Optional, 7" 65,000 color touch screen

Model	SMART AC30 calculator
Internal design	
Data storage capacity	32 000 transactions
Memory	2x Series Flash memories 20 years of data retention 1x EEPROM memory
Processor	32 bits - 80MHz - M4K Core
Communication	
RS232/RS485 port	1x MODBUS RTU port or printer (configurable)
CAN bus	1xExtended CAN Bus 2.0B, 125kbits
Input	
Input number	1
Fonction	Reset volume or delivery authorization
Input type	Free contact or open collector
Power supply	24 VDC - 100mA (12V in option)
Equipment: User interface	Optionall
Display	7" capacitive touch screen TFT-LCD Resolution 800 x 480 65535 colors LED backlighting
Options	1 option available among those below (connection on pad)
Logic inputs	2 NAMUR type inputs
Outputs	2x static outputs 24VDC 2A (pump, valve)
Temperature	1x type PT100
Box configuration	
Material	Aluminium
Weight	0.7kg
Environment	
Operating temperature (min/max)	-40°C / +55°C
Storage temperature (min/max)	-40°C / +80°C
Humidité relative (min/max)	5 % / 95 % (without condensation)
Protection	IP66
Certification	ATEX EEx d IIB T4 (in progress)