

Media 7 Differential Pressure Meter



SAM TANK MANAGEMENT

SAM[®]
DIGITAL

SMART IN FLOW CONTROL

TECHNICAL DATA

| Technical data | | | | |
|---|--|--------------------------|---------------------------|---------------------------|
| Pressure rating | PN 60, overloadable on one side up to 60 bar; oxygen: PN 50, overloadable on one side within the adjusted system pressure | | | |
| Characteristic | Differential pressure proportional to the tank geometry | | | |
| Measuring range in mbar | 0 to 160 | 0 to 600 | 0 to 1600 | 0 to 3600 |
| Adjustable measuring span in mbar | | | | |
| Class $\pm 1\%$ | – | ≤ 630 to ≥ 150 | ≤ 1700 to ≥ 320 | ≤ 3800 to ≥ 720 |
| Class $\pm 1.6\%$ | ≤ 170 to ≥ 60 | ≤ 150 to ≥ 120 | – | – |
| Internal absolute pressure sensor | | | | |
| Measuring range | 0 to 60 bar | | | |
| Deviation from terminal-based linearity | $< \pm 1.6\%$ | | | |
| Requirements | | | | |
| EMC | Devices with a CE marking fulfill the requirements of the Directive 2014/30/EU. Compliance with EN 61000-6-2, EN 61000-6-3, EN 61326-1 and NAMUR Recommendation NE 21. | | | |
| Degree of protection | IP 67 according to IEC 60529 (VDE 470 Part 1, 2014-09) | | | |
| Explosion protection | | | | |
| Type of protection | ATEX/IECEX: Ex ia IIB T4 Gb | | | |
| Power supply | | | | |
| Two-wire version | 4 to 20 mA | | | |
| 24 V version | 18 to 36 V DC | | | |
| 230 V version | 100 to 230 V/50 Hz · 100 to 110 V/60 Hz | | | |
| GSM module for remote data transmission | | | | |
| GSM frequency | E-GSM 850/900/1800/1900 MHz | | | |
| Power output | Class 4 (2 W) with 850/900 MHz; Class 1 (1 W) with 1800/1900 MHz | | | |
| SIM card | M2M Industrial Plug in High Temperature, operating temperature: -40 to $+105\text{ }^{\circ}\text{C}$ | | | |
| Operating temperature | -40 to $+70\text{ }^{\circ}\text{C}$ | | | |

Optional additional functions

- AO (analog output) module for analog output of an internal 4 to 20 mA signal
- AI (analog input) module for analog input of an external 4 to 20 mA signal
- AIA (analog input active) module for analog input of an external 4 to 20 mA signal as well as for output of 12 V to power external equipment
- GSM module to establish connection between the Media 7 Differential Pressure Meter and the SAM TANK MANAGEMENT web portal

MEDIA 7 DIFFERENTIAL PRESSURE METER

With remote data transmission

- Liquid level and differential pressure measurements in pressure tanks, especially for cryogenic gases
- Integrated GSM module for remote data transmission
- Non-contact sensor
- Internal 60 bar absolute pressure sensor
- Modular design
- Easy to install or exchange optional additional functions
- Power supply unit with standby power supply (SPS)
- 4" backlit graphics display and zoom mode of the tank reading
- Easy operation using four capacitive keys including selection of the menu and display language
- Automatic calculation of the liquid/gas density in the tank
- Comprehensive tank and medium database
- Data analysis including consumption trend and estimated date of the next tank filling
- Tank monitoring in combination with SAM TANK MANAGEMENT



Software

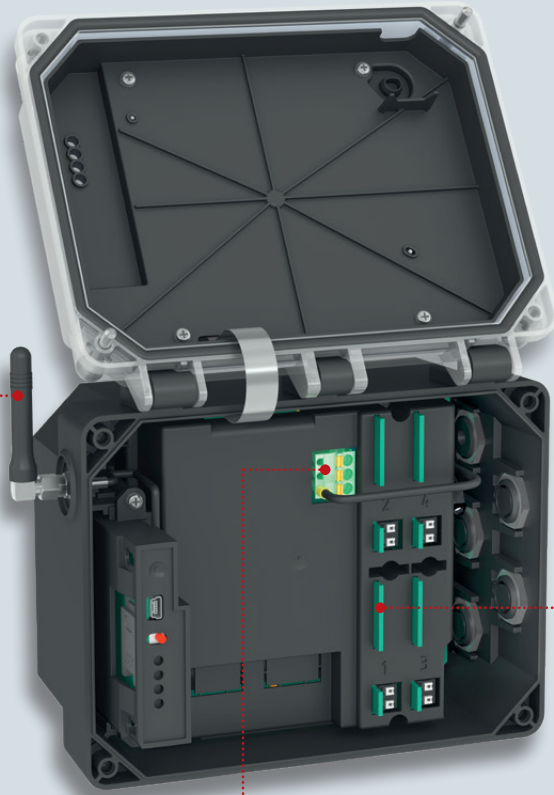
- Automatic density calculation
- Zero and span adjustment
- Comprehensive tank and medium database

Plain-text display

- Scalable to suit the application
- 4" display
- Seven different languages

Intuitive navigation menu

- Capacitive keys
- On-site operation



Data transmission over mobile phone networks

- Online configuration and remote maintenance
- Ad-hoc alarm notification

Integrated power supply unit

- 230 V AC
- 24 V DC

Option modules

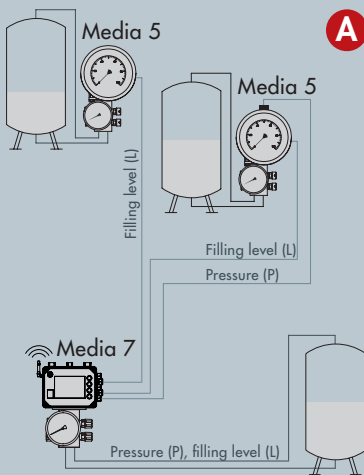
- Maximum four slots
- Analog input (AI and AIA)
- Analog output (AO)

DATA TRANSMISSION

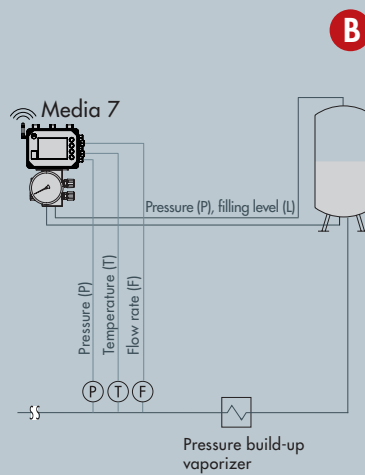


The Media 7 device functions as a hub and can process data from up to four other Media devices or 4-20 mA signals. Wireless data transmission is conducted over mobile phone networks and is independent from mobile network providers. As a result, almost full network coverage is achieved.

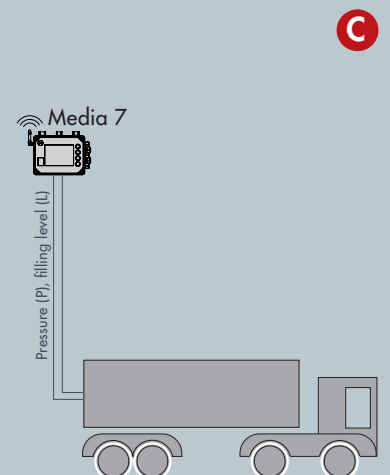
SAM TANK MANAGEMENT



A



B



C

Possible applications for differential pressure meters

- A** Connection of several tanks to the Media 7 device
- B** Processing of several 4-20 mA signals in the Media 7 device
- C** Mobile tank monitoring using Media 7

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DIGITAL

SAMSON AT A GLANCE



STAFF

- Worldwide 4,500
- Europe 3,700
- Asia 600
- Americas 200
- Frankfurt am Main, Germany 2,000

INDUSTRIES AND APPLICATIONS

- Chemicals and petrochemicals
- Food and beverages
- Pharmaceuticals and biotechnology
- Oil and gas
- Liquefied Natural Gas (LNG)
- Marine equipment
- Power and energy
- Industrial gases
- Cryogenic applications
- District energy and building automation
- Metallurgy and mining
- Pulp and paper
- Water technology
- Other industries

PRODUCTS

- Valves
- Self-operated regulators
- Actuators
- Positioners and valve accessories
- Signal converters
- Controllers and automation systems
- Sensors and thermostats
- Digital solutions

SALES SITES

- More than 50 subsidiaries
in over 40 countries
- More than 200 representatives

PRODUCTION SITES

- SAMSON Germany, Frankfurt, established in 1916
Total plot and production area: 150,000 m²
- SAMSON France, Lyon, established in 1962
Total plot and production area: 23,400 m²
- SAMSON Turkey, Istanbul established in 1984
Total plot and production area: 11,053 m²
- SAMSON USA, Baytown, TX, established in 1992
Total plot and production area: 9,200 m²
- SAMSON China, Beijing, established in 1998
Total plot and production area: 10,138 m²
- SAMSON India, Pune district, established in 1999
Total plot and production area: 18,000 m²
- SAMSON Russia, Rostov-on-Don, established in 2015
Total plot and production area: 5,000 m²
- SAMSON AIR TORQUE, Bergamo, Italy
Total plot and production area: 27,684 m²
- SAMSON CERA SYSTEM, Hermsdorf, Germany
Total plot and production area: 14,700 m²
- SAMSON KT-ELEKTRONIK, Berlin, Germany
Total plot and production area: 1,060 m²
- SAMSON LEUSCH, Neuss, Germany
Total plot and production area: 18,400 m²
- SAMSON PFEIFFER, Kempen, Germany
Total plot and production area: 35,400 m²
- SAMSON RINGO, Zaragoza, Spain
Total plot and production area: 18,270 m²
- SAMSON SED, Bad Rappenau, Germany
Total plot and production area: 10,370 m²
- SAMSON STARLINE, Bergamo, Italy
Total plot and production area: 26,409 m²
- SAMSON VDH PRODUCTS, the Netherlands
- SAMSON VETEC, Speyer, Germany
Total plot and production area: 27,090 m²

SAMSON AKTIENGESELLSCHAFT

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