



# RF1 iV PSC

## Smart Payment Meter

Itron has added an innovative Smart Payment function to its newest generation of widely used RF1 gas meters. A member of the Eclipse family of meters, the RF1 iV PSC is the latest Smart Card Smart Payment meter in Itron's Revenue Collection Systems, embodying more than 18 years of Smart Payment and revenue management experience.

### KEY BENEFITS

- » 2-way communication
- » Compliance with EN 1359, MID and OIML standards
- » Multiple fraud detection
- » Long term accuracy & safety
- » Worldclass, ISO 9001 certified
- » European Engineering and Manufacturing

### THE SYSTEM

RF1 iV PSC meter features the RF1 meter, which has been installed in more than 8 million locations worldwide.

It has been enhanced with a Payflex Smart Card token, which offers a rich selection of flexible applications.

The microprocessor-based Smart Card provides low cost, reliable and secure two way communication between the point of sale and the installed meter.

The revenue collection module offers innovative and customer friendly functions, such as no-disconnect periods, self-decommissioning and emergency credit. It also provides leak and fraud detection, overflow control and broad tariff flexibility.

The RF1 iV PSC is part of the Eclipse Enterprise Edition multi-resource revenue collection system, which provides efficient revenue capture and reporting, for both electricity and gas utilities.

### FUNCTIONS

#### Pay-as-you-consume with fraud detection

There is more and more demand from the end consumer and utilities to control consumption more accurately. With the pay-as-you-consume concept the end users need to pay up front for their consumption. The internal valve in the meter will close down when there is a fraud attempt or lack of credit.

#### Data Logging

The RF1 iV PSC has a built-in data logging function that can store up to the 720 index 24 times a day for a 30 day long period. A log keeps track of the last 60 events, alarms and actions on the meter.

#### No Disconnect

The RF1 iV PSC can be configured to avoid disconnection during specified periods. This can include defined times of day, certain days, weekends, or specific periods of the year.

### Self Decommissioning

The RF1 iV PSC meter does not require an on-site visit from the utility to decommission a consumer account. An automatic "close down" special action lets the utility or consumer decommission the account directly.

### Safety and Security

- » Overflow alarm. The meter is designed to automatically close the gas valve if the flow rate exceeds the overflow limit. An alarm displayed on the LCD warns the consumer that the flow rate is too high.
- » Leak detection. A leak test is conducted every time the gas valve opens to ensure other gas appliances have not been left on. The valve automatically closes if the meter detects a flow rate of more than 15 l/h.
- » The valve closes automatically if a fraud attempt is detected. An alarm is recorded in the meter which will go to the system. The valve can be reopened only after the alarm is cleared.
- » Anti-reverse flow prevention. When the meter detects a reverse flow the valve will close and an alarm will be reported.

## Technical Specifications

### Characteristics

Metrology	Meter conforming to EN 1359 standards over other international standards
Accuracy	Maximum permissible errors (% of measurement) +/- 3% from Qmin. to 0.1 Qmax. +/- 1.5% from 0.1 Qmax. to Qmax.
Capacity	G4 Qmin 0.04 m <sup>3</sup> /h Qmax 6 m <sup>3</sup> /h G6 Qmin 0.06 m <sup>3</sup> /h Qmax 10 m <sup>3</sup> /h
Casing	Sheet steel
Electronics housing	ABS
Humidity Max	93% RH at 40°C
Operating temperature	-25°C to +55°C
Storage temperature	-25°C to +70°C
Dust and rain	IP54 protection
Maximum operating pressure	0.5 bar
Protocols prepayment	Payflex Smart Card
Battery	Battery 8 years average life time*
Electronics	Intrinsic safety EEX ia IIA T3
Display	LCD

Note: in case of an outdoor installation, only use plastic cabinets (PVC or GRP) and not metal.  
\* Battery life time may vary depending on usage

### Dimensions (mm)

Connection	DN	Two pipe		Single pipe
		20	25	-
A (spacing)	mm	220 - 250	210 - 250	-
B	mm	274	267	280
C	mm	209	209	202
D	mm	325	325	233
E	mm	71	71	70.7
Weight	kg	3.2	3.2	2.9

### RELATED PRODUCTS

Residential diaphragm gas meter: RF1

Two-way multi-resource prepayment system: Eclipse Enterprise Edition (3E)

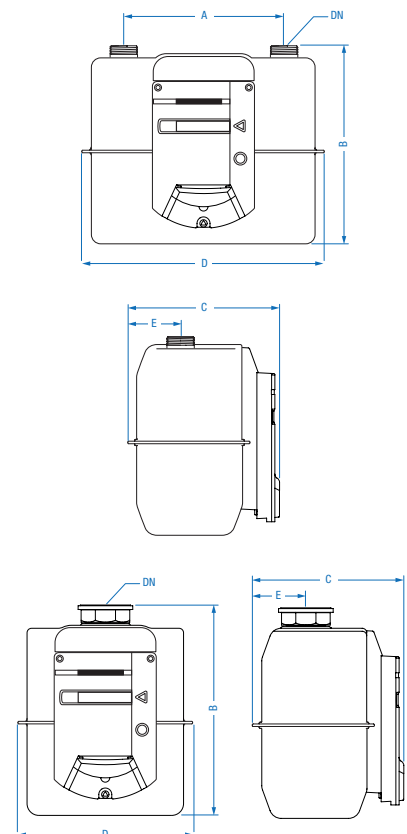


RF1 iV PSC with smart card



RF1 iV PSC Single Pipe

### DIMENSIONS



### BATTERY WARNING

- » Fire, explosion and severe burn hazard
- » Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- » Do not solder directly to the cell.

Respect the storage recommendations



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