



“DJV-COM” S.R.L.



**The radiomodule J100-FC-E
Passport**

DJVM.464001.002 PS

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1 The general data

The passport is intended for acquaintance of the attendants with the device, conditions of operation and maintenance service of radiomodule D100-FC-E (further-module).

The passport contains technical data on a product and defines the order of its operation.

2 Purpose

The module is intended for gathering the information from counters with a pulse output and its transfers to the Center through concentrators.

3 The basic functions

The account of a consumed resource: The module collects data from counters and forms:

- absolute indications of each counter as accumulated result;
- daily and hourly maps of consumption of a resource;
- daily maps of failures.

Data transmission: the module receives impulses from counters and passes them in the concentrator, using a radio channel. The initiator of communication with the concentrator is the module. The exchange of packages in a network is made each 25/50 seconds.

Calendar and clock: the module is supplied by calendar and real-time clock that allows:

- to accept and pass data according to the schedule;
- to attribute to data of a label of time for scheduling consumption and history of failures.

Synchronization of hours: the course of hours of the module is on a regular basis synchronized with hours of the concentrator which, in turn, receives an exact times from the center.

Synchronization occurs during a session of communication with the concentrator.

Non-volatile memory: all the data registered by the module are stored in its non-volatile memory in the form of configured archive.

The module fixes and passes in the Center of data on failures.

4 The device and the basic characteristics

The module is installed near the gas meter with a clamp and two bolts.

For data transmission the module communicates or is direct with the concentrator, or through the similar radiomodules which are carrying out a role of retransmitters of a signal. Number of levels of relaying-up to 30.

A power of the module is carried out from lithium battery.

Modules have the interface channel to which the pulse sensor is connected corresponding type of the counter.

Characteristics:

Characteristics of the module correspond to table 1.

Table 1

The name	Value
Working frequencies of the RF-channel	433,63 MHz and 434,21 MHz
Output power of the RF-channel	<10 mW
Service life lithium batteries	6 years
The maximal distance between modules D100-FC, D100UC	450 m in line of sight and nearby 80 m with obstacle
The storage period of data in non-volatile memory makes	20 years
The volume of buffer memory	96 hour

5 Completeness

The complete set of delivery corresponds Table 2.

Table 2

The name	Quantity
Radiomodule D100-FC	1 pieces
LiIon battery ER14505 (M)	1 pieces
Passport	1 pieces
Seal set (under the order)	1 set
Mounting kit (bracket + 2 screws M4 + 2 nuts M4)	1 set
Notes 1 Group shipment with use of many-placed transport container is supposed.	

6 Resources, service life and storages

Average service life of the concentrator - not less than 20 years.

Average time between failures – not less than 144000 hours.

7 Manufacturer's guarantees

The manufacturer guarantees conformity of the Radiomodule to requirements of the engineering specifications at observance by the consumer of conditions of installation, operation, transportation and storage.

Warranty period of operation – 24 months from the date of commissioning.

Warranty period of storage – 6 months from the date of manufacturing the Radiomodule.

During the specified terms the manufacturer makes replacement of the Radiomodule.

The consumer has the right to the claim.

Claims are not accepted, the Radiomodule is removed from warranty service in case of presence of traces of mechanical damage.

8 Conditions of storage and transportation

Transportation of the Radiomodule to packing by all types of transport is supposed.

Conditions of transportation and storage: from a minus 30°C up to 60°C.

In premises for storage the maintenance of a dust, acids and alkalis, aggressive gases and other harmful impurity causing corrosion, should not exceed the maintenance of active agents for an atmosphere of type 1, according to GOST 15150.

9 Acceptance certificate

It is made in Moldova



The radiomodule
D100-FC-E

DJVM.464001.001

Factory number №: _____

Corresponds to the engineering specifications and it is recognized serviceable.

Date of manufacturing _____ (Stamp)

_____/_____/_____
(A print of a brand, the personal signature, decoding of the signature of the official of the factory responsible for acceptance.)

Movement of a product at operation

Installation date	Where it is established	Date of removal	The reason of removal

10 Conditions of operation

The module is intended for continuous round-the-clock work in the closed premises. In operating conditions of application the module is steady against influence of temperature of air from a minus 30°C up to +60°C and relative humidity of 90 % at temperature 25°C (without condensation of a moisture).

In case of external application, the module should be established necessarily inside of the tight protective boxing protecting it from direct hit of a moisture and solar beams.

The module should be located on a vertical surface of a gas meter.

Length of a cable from the module up to the gauge of a pulse output no more than 0,5 meters.



Radiomodule D100-FC-E
(diameter of 31 - 33mm, length 320-330mm)

11 Installation lithium batteries

Modules are delivered with lithium battery. She is included in the complete set of delivery. Lithium battery is established in the Radiomodule before installation on object.

For installation or replacement lithium batteries on object, it is necessary to execute following actions:

To remove a seal of the serving enterprise (the self-collapsing sticky tape which is sealing up a joint between the case of the module and the established surface).

Remove the sealing plug.
Remove the board from the module housing.
Replace the battery, observing the polarity shown on the PCB.
Slide the card into the module housing.
Install sealing plug.
Tighten the mounting screws on site.

12 An example of on-site installation

