

# MEDIPO - ZT s.r.o.

ASSOCIATION OF MANUFACTURES AND SUPPLIERS OF MEDICAL DEVICES

office I: Kohoutova 24, 613 00 Brno  
tel./fax: +420 548 525 348  
e-mail: info@medipo.cz

office II: Slaměňikova 23, 614 00 Brno  
tel./fax: +420 545 210 119  
www: http://www.medipo.cz

## INFUSION PUMPS IT 1012 and IT 1013

Are designed for intravenous and intra-arterial infusions of drugs, parenteral or enteral nutrition or possibly for blood transfusion.



**IT 1012** uses standard infusion sets for gravitational infusions. This device counts drops and converts them to volume. Infusion sets are cheap and this also results in low operational costs. The user enters dosing in volume, i.e. in "ml". When dosing solutions with marginal viscosity (oil solutions), it is suitable to use the possibility of a simple calibration.

**IT 1013** uses infusion sets with inserted thin soft hoses with guaranteed inner diameter (IS 121 or IVAC). The dosed volume is controlled using the speed of the motor. The drop sensor gives only information on the function. It is advantageous to use this device without the drop sensor.

It can be used in vehicles if completed with a cable for connection to the dashboard supply voltage socket.

A drop sensor, detector of air bubbles and a sensor of pressure in the infusion set hose control safe course of the infusion **with both types**. The user can set limits of monitoring of these parameters.

**Infusion pumps IT 1012 and IT 1013** can be operated on a stable pad, on a mobile stand with two brakes or using a cable for connection to a dashboard supply voltage socket in a vehicle. There are also free options of other various special functions such as calculations, determination of a daily dosing profile,

continuous monitoring of drugs added to the infusion solution, etc.

**Service programmes provide identification of potential failures.**

### Technical specifications:

- Communication language: user's setting: Czech, English, German
- Infusion speed: 1 to 1000 ml/h (IT 1012),  
1 to 1500 ml/h (IT 1013)
- Operational pressure: up to 350kPa, setting of pressure limits:  
60, 80, 120 kPa
- Dosing accuracy:  $\pm 2\%$
- Capacity of internal accu: min. 4 hours
- Air bubbles detector: (basic setting: 0.05ml)
- Power demand: 15VA
- Dimensions: 202 x 195 x 212mm
- Weight: 4kg



## **Basic Parameters:**

### **Infusion Pump IT 1012 and IT 1013**

- Volumetric – infusion parameters, their setting and control are performed in the volumetric mode.
- Clear communication with an operator through LED alpha-numeric display
- Dosing speed adjustable between 1 – 1000 ml/h per 1-ml steps for IT 1012 type
- Dosing speed adjustable between 1 – 1500 ml/h per 1-ml steps for IT 1013 type
- Speed can be programmed either in ml/h or volume per time
- Drop detector is supplied for both types; it is not necessary for IT 1013 operation
- Pump can be operated without a drop detector (IT 1013)
- Standard infusion sets can be used for gravitational infusion IS 103 and others (IT1012)
- Both the domestic (IS121) or foreign (IVAC series) infusion sets may be used with IT 1013
- The total adjustable dosed volume (target) is 1 ml – 9999 ml
- KVO if the target volume is reached
- Occlusion pressure set at 80 kPa
- Occlusion pressure may be limited in 3 levels, namely, 60 kPa, 80 kPa, and 120 kPa
- Indication of air bubbles exceeding 50 microlitres in the set (it may be adjusted)
- Bolus – volume limit setting
- Dosing accuracy  $\pm 2\%$
- Main supply; internal accumulators – at least 4 hours; external accumulators in an ambulance car

### **Other Parameters Available**

- Device automatic testing before the parameters setting begins
- “Calculation” mode enables setting of the active substance weight, the volume to which the substance is applied, and a patient’s body weight – the supplied volume of the active substance during infusion can be displayed
- “Dosing Profile” mode enables setting of the continuous change of the dosing speed in up to six time intervals during infusion
- The set may be calibrated automatically
- CC function enables coding of the lock for the infusion parameters setting
- Parameters of air detection in the set may be adjusted
- Sound level may be adjusted
- Communication language may be set
- Parameters of the previous infusion may be displayed after “M” is pressed
- Night lighting of a keyboard may be activated
- Service programs for a failure identification. The failure type is clearly described verbally on LED alpha-numeric display
- The device, particularly IT1013 operated without the drop detector, may be used for enteral nutrition
- Infusion pumps may be operated located on a table; a bottle or a bag is suspended on a suspension device or it is fixed onto a mobile stand fitted with two brakes or onto a horizontal bar.