# SYRINGE INFUSION PUMF



Emco Meditek, an ISO9001:2008 & ISO13485:2003 certified company, was formed in the year 1989 with the main objective of manufacturing and marketing of Electronic Medical Equipment. The equipment are designed and manufactured indigenously with the assistance of technology obtained from leading Medical Equipment manufacturing companies around the world especially USA, UK and Germany.

ISO 9001:2008



# **EMCO** Infusor 960



- Automatic Syringe Size Sensor
- Two Modes available Easy Mode & Normal Mode
- Body Weight programming available in Normal Mode
- Infusion Rate upto 1500 ml/hr
- Intuitive & user friendly operations, Simple entry of parameters via numeric keypad
- Automatic syringe size detection
- Accepts syringe from 5 ml to 50/60 ml of all majors Indian Brands like Dispovan, Romsons as well as all imported brands (List can be customized in Set-up Menu)
- Programmable infusion & bolus rate up to 1500 ml/h (Max)
- Easy Pump Mode Syringe pump can be programmed to start infusion within 3 steps (Select Syringe, Enter Rate, VTBI, Start)
- Titration allows change of infusion parameters without interruption of infusion
- Programmable infusion in Body Weight Modes (Normal Mode)
   (Options are: ml/hr, mg/hr, ug/hr, mg/kg/hr, ug/kg/hr, mg/kg/min, ug/kg/min)
- Programmable infusion in "volume over time" mode
- Set-up menu enables customization of the pump
- Anti-bolus & anti-siphon functions increase patient safety
- Drug library contains 100 frequently used drug names (List can be customized in Set-up Menu)
- Automatic and manual bolus modes (Audio reminder during bolus)
- Bolus Dose can be changed without interruption of infusion (Normal Mode)
- Last Configuration (Drug, Rate, VTBI, Bolus, Occlusion Level) is saved
- More than 8 hours battery backup @ 5ml/hr rate
- No Power, Check AC Mains Supply; Low Battery; Very Low Battery; Occlusion Alarm; X Min Pre Alarm; KOR (KVO); End of Infusion; Syringe is Empty; Internal Error; Wrong Insertion/No Syringe Inserted/Insert Syringe into Plunger/Please Close the Clamp (Syringe Loading Errors); Unsecured Barrel; Disengaged Plunger; 2 min Inactive Attention Alarm
- Standby Timer (upto 999 min)
- KOR Mode (Starts 2 min after STOP, Immediately after End of Infusion/Syringe Empty) (KOR Rate can be customized in Set-up Menu)
- Ideally suited for adults and neonates in general wards, critical/intensive care, operating/emergency rooms



## **EMCO** Infusor 960



### **SYRINGE INFUSION PUMP**

## **Technical Specifications**

#### SYRINGE SIZES

5, 10, 20, 50/60, 100ml

#### **INFUSION MODES**

Easy & Normal

#### **INFUSION RATES**

 Syringe
 ml/hr

 5ml
 0.1 - 200 ml/hr

 10ml
 0.1 - 450 ml/hr

 20ml
 0.1 - 750 ml/hr

 50/60ml
 0.1 - 1500 ml/hr

 100 ml
 0.1 - 1500 ml/hr

#### **BOLUS RATES**

 Syringe
 ml/hr

 5ml
 10 - 200 ml/hr

10ml 10 - 450 ml/hr 20ml 10 - 750 ml/hr 50/60ml 10 - 1500 ml/hr 100 ml 10 - 1500 ml/hr

(Bolus Rate cannot be set lower than Infusion Rate)

Note: During Bolus, "X min Prealarm" & "Low Battery" alarms are delayed until BOLUS key is pressed

#### FLOW RATE ACCURACY

±2% OR ± 0.1 ml/hr whichever is greater (with recommended/approved syringes)

#### **MECHANICAL ACCURACY**

±1%

#### **VOLUME LIMITS**

0.1 - 99.9 ml in 0.1 ml step 100 - 999 ml in 1 ml steps unlimited entered volume (NO LIMIT)

#### **TOTAL VOLUME**

0.1 - 9999.9 ml

#### **INFUSION TIME**

999hrs 00 min 00sec

#### **BOLUS TYPES**

Automatic and manual (user selectable)

#### KOR (Keep Open Rate) RATE

Programmable through Setup Menu (0.1 to 10 ml/h)

If Infusion Rate less than Programmed KOR Rate - KOR rate will be the Infusion rate

#### **OCCLUSION ALARMS PRESSURE**

LOW  $300 \pm 112$  mmHg  $(40\pm15$  Kpa) MED  $600 \pm 120$  mmHg  $(80\pm20\%$  Kpa) HIGH  $900 \pm 180$  mmHg  $(120\pm20\%$  Kpa) (LOW & MED limits available only with 50/60/100ml syringes)

#### **ALARMS**

No Power, Check AC Mains Supply; Low Battery; Very Low Battery; Occlusion Alarm; X Min Pre Alarm; KOR (KVO); End of Infusion; Syringe is Empty; Internal Error; Wrong Insertion/No Syringe Inserted/Insert Syringe into Plunger/Please Close the Clamp (Syringe Loading Errors); Unsecured Barrel; Disengaged Plunger; 2 min Inactive Attention Alarm

#### STANDBY TIMER

1 to 999 min

#### **DISPLAY TYPE**

LCD with Blue backlight

#### **AC POWER SUPPLY**

230VAC ± 15%, 50/60 Hz

#### **POWER CONSUMPTION**

10VA Max

#### **FUSE**

T100 mA, 250Vac, Slow Blow, 5x20mm

#### **BATTERY TYPE**

NiMh Rechargeable battery - 9.6 V, 1600mAh

#### **BATTERY BACK-UP**

>8 hrs @ 5 ml/hr

#### **BATTERY CHARGING TIME**

Upto 24 hrs to 100% charge

## PROTECTION AGAINST CURRENT LEAKAGE

Debfibrillator-proof type CF applied part

## PROTECTION AGAINST ELECTRICAL SHOCKS

Class II

## PROTECTION AGAINST SPLASHING LIQUID

IPX4 (splashing water protected)

#### **ELECTRICAL SAFETY & EMC**

IEC 60601- (1, 1-2, 2-24)

## MAXIMUM VOLUME UNDER SINGLE FAULT CONDITION

<0.5ml

#### **OPERATING CONDITIONS**

Temperature: +5°to 40°C Relative Humidity - 90% max (non condensation) Atmosph Pressure 70-160Kpa

#### STORAGE CONDITION

Temperature - 0 to 40 ° C Relative humidity - 90% max (noncondensing Atmosph Pressure 70-160 KPa

#### **WEIGHT**

2.5 kg

#### **DIMENSION**

265 (W) x 185 (D) x 135 (H) mm

#### MOUNTING

Table top operation Universal pole clamp

Specifications subject to change without prior notice.



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