

# CRONO 50 SC

REF: PS3AC



## Ambulatory infusion pump

### INTENDED PURPOSE

**CRONO 50 SC** is an ambulatory pump for subcutaneous infusion of drugs in palliative care of terminally ill patients.

### PUMP DESCRIPTION

**CRONO 50 SC** is a medical device.

**CRONO 50 SC** is an union of high technology and innovative design. Its compact size and light weight make it ideal for home use.

**CRONO 50 SC** uses 50 ml dedicated reservoirs.

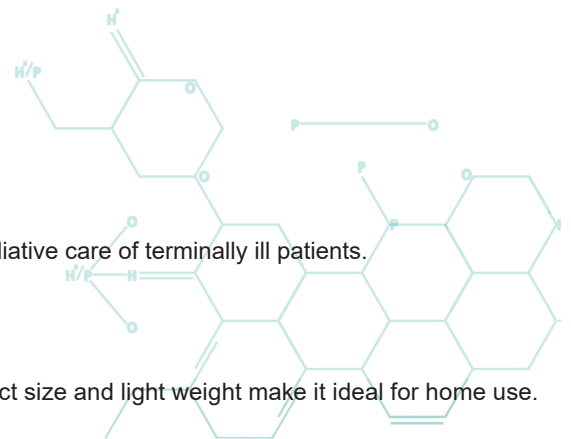
An outstanding feature of the pump is its ability to allow 4 modes of administration:

- Continuous;
- Bolus on request (PCA);
- Clinical bolus (managed by the doctor);
- Combined (continuous + bolus on request + clinical bolus).

The pump is equipped with a settings lock to prevent incorrect or unauthorised administration.

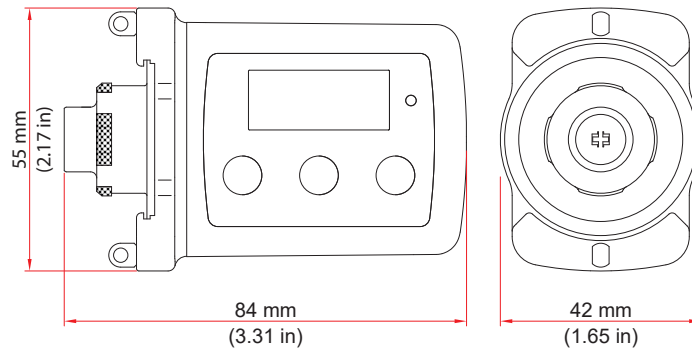
The pusher mechanism, which operates directly on the rubber piston of the reservoir, enables the pump to combine high delivery pressure with excellent precision while administering the drugs.

**CRONO 50 SC** is provided with a liquid crystal display (LCD) which shows practical information to the doctor and patient about the settings, operations and diagnostics of the pump.



# TECHNICAL FEATURES

## Pump dimensions



<b>Pump weight</b>	139 g (4.90 oz.), including battery
<b>Battery</b>	Lithium CR123A 3V (battery life about 90 infusions)
<b>Single-use reservoir</b>	Dedicated with a 50 ml capacity and a Luer-Lock universal security attachment
<b>Administrable volumes</b>	Programmable from 1 ml to 50 ml in increments of 1 ml
<b>Prime function</b>	Only available at the start of the infusion. The maximum deliverable volume is 1.5 ml
<b>Flow rate</b>	Programmable, from 0.05 to 5 ml/h in increments of 0.01 ml/h The function can be excluded by setting 0 ml/h
<b>Bolus dose</b>	Programmable, from 0.10 ml to 2 ml in increments of 0.02 ml It is possible to disable this function by setting 0 ml
<b>Clinical bolus</b>	Programmable, from 0.10 ml to 2 ml in increments of 0.02 ml The function can be excluded by setting 0 ml
<b>Interval between boluses</b>	Programmable from 5 min to 24 h with the following modes: <ul style="list-style-type: none"> <li>• from 5 min to 1 h in increments of 5 min</li> <li>• from 1 h to 24 h in increments of 15 min</li> </ul> It is possible to disable this function by setting <b>no,Lt</b>
<b>Bolus doses deliverable in one hour</b>	From 0 to 12 boluses. The function may be disabled by setting <b>no,Ln</b>
<b>Shot volume</b>	20 µl (minimum quantity administered at each motor rotation)
<b>Flow rate precision</b>	+/- 3 %
<b>Occlusion pressure</b>	1.8 bar +/- 0.8 ( <b>PL1</b> ) ; 2.2 bar +/- 1 ( <b>PL2</b> ) ; 3.2 bar +/- 1.2 ( <b>PL3</b> )
<b>Post-occlusion bolus</b>	About 0.8 ml ( <b>PL1</b> ), 1.1 ml ( <b>PL2</b> ), 1.3 ( <b>PL3</b> )
<b>Settings memory</b>	All settings are automatically stored in a flash memory which is retained even if the device is left without a battery.
<b>Display</b>	Liquid crystal display (LCD) (dimensions 11 x 28 mm; 0.43 x 1.1 in)
<b>Motor</b>	Coreless DC motor, the rotation of which is controlled by an infrared system
<b>Settings lock</b>	Two configurable levels
<b>Electronic circuit with twin microcontrollers</b>	Ensures a more reliable and safer infusion system
<b>Safety circuits</b>	These check that the device is functioning correctly, intervening in the event of any anomaly with sounds and messages on the display
<b>Ingress protection rating</b>	IP 42
<b>Anti-free-flow safety system</b>	Avoids the occurrence, within the delivery set, of a flow not under the control of the instrument but caused by the effect of gravity
<b>Buzzer sound pressure level</b>	53 dBA +/- 5 dBA
<b>Warranty</b>	2 years from the date of purchase against any material or manufacturing defects
<b>Standard equipment</b>	CRONO 50 SC ambulatory pump, Carry-case, Elastic belt, Fabric case, Collar strap, 2 Batteries (1 of which in the pump), Battery-cover opening tool, 2 Instructions for use (doctor and patient)
<b>Environmental conditions for use</b>	+5°C / +40°C 15% / 90% RH (non-condensing, water vapour partial pressure max 50 hPa) 700 hPa / 1060 hPa
<b>Environmental conditions for storage and transport</b>	-25°C / +70°C 15% / 90% RH