FRESENIUS KABI

caring for life

Agilia SP TIVA
Agilia SP TIVA WiFi

Syringe infusion pumps providing
intuitive intravenous anaesthesia

Dose rate programing for lower risk of
errors in prescriptions

TCI infusion mode

Wide flow rate ranging from 0.1-1200
mL/h and an accuracy of +/- 3 %

Adaptable to all protocols

Up to 19 drug libraries

Easy and intuitive to use

Stand alone or rack mounted

2 pressure modes and Dynamic Pressure
System (DPS)

Agilia SP TIVA & **Agilia** SP TIVA WiFi

Infusion

Flow rate range
0.1-1200 mL/h
0.1 mL/h increment from 0.1 to 99.9 mL/h (optionally 0.01 mL/h from 0.10 to 9.99 mL/h), 1 mL/h from 100 to 1200 mL/h
Flow rate can be restricted for each drug (soft and hard limits) with Vigilant Master Med, The Dose Error Reduction Software

Flow rate accuracy
+/- 1 % on mechanism ; +/- 2 % with syringes

Syringes capacities
5, 10, 20, 30/35, 50/60 CC

Type of syringe
Up to 100 types

Infusion Modes
· mL/h mode
· Dose rate modes: ng/h, ng/kg/min, ng/kg/h, microg/min, microg/h, microg/kg/min, microg/kg/h, mg/min, mg/h, mg/24h, mg/kg/min, mg/kg/h, mg/kg/24h, mg/m2/h, mg/m2/24h, g/h, g/kg/min, g/kg/h, g/kg/24h, mmol/h, mmol/kg/h, mmol/kg/24h, mU/min, mU/kg/min, mU/kg/h, U/min, U/h, U/kg/min, U/kg/h, kcal/h, kcal/24h, kcal/kg/h, mEq/min, mEq/h, mEq/kg/min, mEq/kg/h
· TCI infusion mode
· Dilution setting: -- units / mL or -- units / -- mL
· With or without loading dose
· Volume or dose / time: 0.1 - 99.9 mL; 00 h 01 - 96 h 00
· Volume limit: 0.1 - 999 mL

TCI Mode
Pharmacokinetic Models:
· Marsh & Schnider with Plasma and TCI Effect target
  for Propofol administration in adults
· Kataria & Paedfusor with Plasma target for Propofol
  administration in pediatrics
· Minto, Gepts & Scott for with Plasma and TCI Effect target
  for Remifentanil, Sufentanil and Alfentanil administration in adults

Volume/Dose infused
Volume: 0.1 - 999 mL / Dose: 0.1 - 9999 units

Priming
3 modes: mandatory, not mandatory, or advised / Rate: 1200 mL/h

Bolus
· Direct bolus: Rate: 50 - 1200 mL/h (50 mL/h increment).
· Programmed bolus (dose or volume / time): 0.1 - 99.9 mL
  0.01 - 9999 units / 1 second - 24 h

Induction dose
Dose / time: 0.01 - 9999 units / 1 second - 24 h
Rate auto-calculation

End infusion (V/T & VL)
KVO: adjustable from 0.1 to 5 mL/h, continuous infusion or stop

Quick start
Not mandatory prime set by default resulting in fast start if user does not prime with bolus button ensuring programmed flow rate to be reached faster

Pause
Programmation from 1 minute to 24 hours, increments from minute to minute

Data log event
1500 data log events in real time

Graphical history
Volume / dose infused, pressure, flow rate

Night mode
The night mode decreases the brightness of the screen and the green lights. The key press sound can optionally be turned off. The night mode can be programmed manually or automatically in a variable time range

Profiles
Basic profile infusion without any display of the drug names and with TCI modes.
19 Custom profiles configurable with Vigilant Master Med: Drug library to be created with up to 200 drugs
Drug list with a list of drug names
Configuration only: custom pump configuration without Drug Name

Pressure management

Pressure modes
2 modes available: variable or 3 pre-set levels - Range from 50 to 900 mmHg. (25 mmHg increment from 50 to 250 mmHg / 50 mmHg increment from 250 to 900 mmHg). Can be enabled / disabled and adjusted

DPS
The Dynamic Pressure System - DPS - warns of pressure variations. A risk of obstruction or a possible leak in the infusion line can thus be anticipated

Pressure monitoring
Graphic representation of the pressure in the infusion line and of the pressure limit thanks to the pictogram

Anti-bolus system
Reduces significantly bolus after occlusion release*
≤0.35 mL max for a 50 mL syringe
* Test condition: back pressure: 0 mmHg - Syringe: BD Precise

Alarms / Pre-alarms / Security

Pump status
GREEN for infusion in progress, ORANGE for Low and Medium priority, RED for High priority - Visibility at 4 meters minimum
All alarms are expressed by means of light indicators, written words, pictograms and sound beeps

Syringes installation control
Syringe barrel clasp check, plunger head detection, anti-siphon system check, flange detection

Infusion control
Occlusion pressure pre-alarm, occlusion pressure alarm, end of infusion pre-alarm, end of infusion alarm, volume limit pre-alarm, volume limit alarm, hard and soft flow rate limits, start infusion at pause end

Device control
Disengaged driving mechanism alarm, low battery pre-alarm, discharged battery alarm, battery capacity display in hours and minutes, unconfirmed programming, technical malfunction alarm (auto-test, rotation), drive system advance check, watchdog check, communication connection failure, plug-head disengagement, auto-lock/lock code (on Keypad)

Maintenance
Preventive maintenance warning

Technical specifications

Manual pusher
Protection for the ongoing infusion thanks to "Push-Guard"

Display
Blue graphic LCD monochrome, size 66 mm x 33 mm
(256 x 128 pixels)

Swinglock clamp
Versatile clamp that allows the fixation on a rail or on a pole
(Pole: 20-40 mm max. / Rail: 25-35 x 10 mm)

Stackability
Up to 3 devices self-stackable on a pole

Dimensions (H/W/D) / Weight
135 x 345 x 170 mm / Approximately 2.1 kg

Battery
Characteristics: 7.2 V 2.2 Ah - Li-ion Smart battery, remaining battery life and battery charge level available on the display

Battery Life (when fully charged):
- Agilia SP TIVA and Agilia SP TIVA WiFi (WiFi disabled / not used):
> 11 h at 5 mL/h
- Agilia SP TIVA WiFi (WiFi enabled):
> 6 h at 5 mL/h

Battery recharge:
- Pump OFF: < 6 h
- Pump ON: < 20 h

Waterproofness
IP22

Power supply
100 V - 240 V AC - 50 / 60 Hz with functional earth

Compliance

Electromagnetic compatibility EMC
IEC 60601-1-2, IEC 60601-2-24

CE Mark
Complies with the 93/42/EEC Medical Device Directive or the Medical Device Regulation (EU) 2017/745

Electrical Compliance
Protection against leakage current: defibrillation-proof type CF
Protection against electric shocks: class II in accordance with IEC 60601-1

Alarm system
IEC 60601-1-8

Usability Engineering
IEC 60601-1-6 and IEC 62366

Wireless LAN (For Agilia SP TIVA WiFi only)

Technology
IEEE 802.11 a/b/g/n. Frequency Band: 2.400 -> 2.500 GHz (2.4 GHz is ISM band) / 4.900 -> 5.850 GHz (High Band)

Modulation
OFDM with BPSK, QPSK, 16-QAM, and 64-QAM 802.11b with CCK and DSSS

Wireless Security
WPA/WPA2-Entreprise, WPA/WPA2-PSK

Network Protocols
TCP, IPv4, DHCP, HTTP
CE, FCC and IC compliant