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The company and its products are certified in accordance with: 93/42/EEC EU Medical Device Directive EN ISO 13485





On December 30, 2008, Moog Inc. acquired 100% of the stock of Viltechmeda UAB. Moog Inc. is a worldwide designer, manufacturer, and integrator of precision motion control products and systems. Moog's high-performance systems control military and commercial aircraft, satellites and space vehicles, launch vehicles, missiles, industrial machinery, wind energy, marine applications and medical equipment.

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SP-12S Pro

Infusion rates	0.1 to 99.9 ml/h in 0.1 ml/h steps 100 to 1500 ml/h in 1 ml/h steps
Dose rate units	mg, μg (/kg) /min or h
Volumetric accuracy	±2 % (according to IEC/EN 60601-2-24 standard)
Compatible syringes	5 – 100 ml of all major brands including additional brands (upon agreement)
Occlusion pressure	high – 120 \pm 35 kPa medium – 80 \pm 25 kPa (for 50/60 ml syringes and above) low – 40 \pm 15 kPa (for 50/60 ml syringes and above) or high – 90 \pm 30 kPa medium – 60 \pm 25 kPa (for 50/60 ml syringes and above) low – 30 \pm 15 kPa (for 50/60 ml syringes and above)

Universal syringe pump. The SP-12S Pro offers the required maximum level of safety and flexibility for the precise delivery of medications within several patient care areas. The possibility to set up to 64 different profiles each up to 10 steps enables the use of preprogrammed drug protocols. It is recommended to use in the offices of general practitioners, as well as in the general wards, ICU, CCU and anesthesia departments.





SEP-21S Plus

Infusion rates	0.1 to 99.9 ml/h in 0.1 ml/h steps 100 to 1500 ml/h in 1 ml/h steps	
Dose rate units	mg, μg (/kg) /min or h	
Volumetric accuracy	±2 % (according to IEC/EN 60601-2-24 standard)	
Compatible syringes	5 – 60 ml of all major brands including additional brands (upon agreement)	
Occlusion pressure	high – 120 \pm 35 kPa medium – 80 \pm 25 kPa (for 50/60 ml syringes and above) low – 40 \pm 15 kPa (for 50/60 ml syringes and above) or high – 90 \pm 30 kPa medium – 60 \pm 25 kPa (for 50/60 ml syringes and above) low – 30 \pm 15 kPa (for 50/60 ml syringes and above)	

Universal double syringe pump. Two independent channels on one base ensure accurate volume delivery and consistent flow of infusions, saving space and costs. The pump has the possibility to set 64 different profiles each up to 10 steps. It is recommended to use in the offices of general practitioners, as well as in the general wards, ICU, CCU and anesthesia departments.





SP-14S

Basal rate	0 to 100.0 ml/h in 0.1 ml/h steps
Loading dose, PCA dose, Bolus dose	0 to 20.0 ml in 0.1 ml steps 0 to 999 μg in 1 μg steps 0 to 99.9 mg in 0.1 mg steps
Dose rate units	mg or μg /h
Lockout interval	0 to 999 min in 1 min steps
Volumetric accuracy	\pm 2% or \pm 0.1 ml/h (the greater of these values)
Compatible syringes	5, 10, 20, 30, 50/60, 100 ml of major brands including additional brands (upon agreement)
Occlusion pressure	high – 120 kPa \pm 25 kPa medium – 80 kPa \pm 20 kPa (for 50/60 ml and 100 ml syringes only) low – 40 kPa \pm 15 kPa (for 50/60 ml and 100 ml syringes only)

The SP-14S allows the patient to control the flow of their pain medication within medical staff specified limits. The lockable syringe cover prevents unauthorized drug access. Patient history shows PCA attempts, usage of drugs, and up to 2000 individually logged events. It is recommended to use in departments of intensive and critical care.





aitecs[®] DF-12M

Infusion rates	0,1- 99,9 ml/h (in 0.1 ml/h increments) 100 - 1200 ml/h (in 1 ml/h increments)	
Volumetric accuracy	±5% (according to IEC/EN 60601-2-24 standard)	
Occlusion pressure	7 levels 100- 950 mmHg	
Battery operation	approx. 6 hours at a flow rate of 25 ml/h	

The DF-12M Volumetric Infusion Pump can be used for continuous flow rate infusion of medication and transfusion in ICU or CCU, as well as infusion of anesthetic, anticancer agent, or nutrients. The pump is adjustable with most IV sets using pre-programmed data.



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aitecs[®] 2016

Infusion rates	0.01-99.99 ml/h in steps of 0.01 ml/h 100.0-999.9 ml/h in steps of 0.1 ml/h 1000-2200 ml/h in steps of 1 ml/h	
Dose rate units	ml, g, mg, mcg, ng, Units, kUnits, mUnits, mcUnits, mol, mmol, mcmol, nmol, mEq (/kg or m2) /min or h or 24h	
Volumetric accuracy	±2 % (according to EN 60601-2-24 standard)	
Compatible syringes	2/3, 5/6, 10/12, 20/22, 30/35, 50/60 ml of all major brands including ad- ditional brands upon agreement	
Occlusion pressure	10 levels (for syringes 10 ml and above) 6 levels (for syringes 5/6 ml and smaller) 4 levels (for 2/3 ml syringes)	

Advanced syringe pump. The aitecs[®] 2016 is equipped with automatic syringe plunger capturing. The aitecs[®] 2016 offers enhanced safety, reliability, ease of use and flexibility. The aitecs[®] 2016 is extremely versatile and meets the needs of all patient types from neonatal to adults. The pump can be used as a standalone device or as part of a patient data management system (PDMS), clinical information systems (CIS) and infusion monitoring system (AIMS16). The pump has customized drug library (up to 350 drugs labels) and the event log, which is able to record more than 2,000 events. Graphic LCD display. Advanced communication (USB, IrDA interfaces). It is recommended to use the pump in anesthesiology and intensive care departments.





aitecs[®] 2017

Infusion rates	0.01-9.999 ml/h in steps of 0.001 ml/h, 10.0-99.99 ml/h in steps of 0.01 ml/h, 100.0-999.9 ml/h in steps of 0.1 ml/h, 1000-2200 ml/h in steps of 1 ml/h	
Dose rate units	ml, g, mg, mcg, ng, U, kU, mU, mcU, mol, mmol, mcmol, nmol, mEq/ kg, m2 /24h, h, min	
Volumetric accuracy	±2 % (according to EN 60601-2-24 standard)	
Compatible syringes	2/3, 5/6, 10/12, 20/22, 30/35, 50/60 ml of all major brands including additional brands upon agreement	
Occlusion pressure	10 levels (for 10-60 ml syringes) 6 levels (for 5/6 ml syringe) 4 levels (for 2/3 ml syringe)	

The aitecs® 2017 Syringe Pump is an advanced, configurable and versatile syringe pump offering enhanced safety in all clinical environments. The pump can be used as a stand-alone device or be stacked together with other aitecs® pumps on the aitecs® Infusion Docking Station providing connectivity compatible with the aitecs® Infusion Management System (AIMS16), Patient Data Management Systems (PDMS) and/or Hospital Information Systems (HIS) via the open system architecture. The pump is intended for precise and continuous dosing of solutions injected by means of disposable syringes in different areas of medicine (reanimation, surgery, cardiology, anaesthesiology, haematology and oncology). The pump has customized drug library (up to 350 drugs labels) and the event log, which is able to record more than 2,000 events. It has 7 infusion modes: continuous, volume over time, dose over time, intermittent, TPN, TIVA, and TCI (TIVA and TCI modes are available only in TCI version).





aitecs® 3017

Infusion rates	0.1 – 1500 ml/h in 0.01 ml/h increments on lower rates
Dose rate units	ml, g, mg, mcg, ng, U, kU, mU, mcU, mol, mmol, mcmol, nmol, mEq/ kg, m2 /24h, h, min
Volumetric accuracy	+/- 5% when tested in accordance to IEC/EN 60601-2-24 standard (maximum set change interval 72 hours)
Occlusion pressure	10 occlusion levels in range from \sim 80 mmHg* to \sim 950 mmHg*

* - obtained at room temperature 22°C \pm 2°C.

The aitecs[®] 3017 Infusion Pump is an advanced, configurable multi-purpose infusion pump, with a common user interface to the aitecs[®] range, that provides patient safety by facilitating use from basic infusions to advanced clinical applications. This ensures that the aitecs[®] 3017 Infusion Pump is suitable for use in all units within the hospital. The pump can be used as a stand-alone device or be stacked together with other aitecs[®] pumps on the aitecs[®] Infusion Docking Station providing connectivity compatible with the aitecs[®] Infusion Management System (AIMS16), Patient Data Management Systems (PDMS) and/or Hospital Information Systems (HIS) via the open system architecture.



aitecs[®] 3017 Administration Sets

50512 PRIMARY Administration Set	PRIMARY Administration Set, for the infusion of fluids and/or drugs that have no incompatibility with PVC and no particular filtration requirements. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 266 cm Approximate priming volume: 21 mL	
50174 PRIMARY Administration Set, 1 needle-free Y-site	PRIMARY Administration Set with one needle-free Y-site, for the infusion of fluids and/or drugs that have no incompatibility with PVC and no particular filtration requirements. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 266 cm Approximate priming volume: 22 mL	
50173 PRIMARY Administration Set, 2 needle-free Y-sites	PRIMARY Administration Set with two needle-free Y-sites, for the infusion of fluids and/or drugs that have no incompatibility with PVC and no particular filtration requirements. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 266 cm Approximate priming volume: 22 mL	
50176 PRIMARY Administration Set, 2 needle-free Y-sites, 1.2µm filter	PRIMARY Administration Set with two needle-free Y-sites and a 1.2µm inline air eliminating filter, for the infusion of lipids and TPN or fluids and/or drugs that have no incompatibility with PVC and requiring filtration. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 265 cm Approximate priming volume: 24 mL	
50175 LOW SORBING Administration Set, 2 needle-free Y-sites	LOW SORBING Administration Set with two needle-free Y-sites, for the infusion of fluids and/or drugs that are incompatible with PVC and have no particular filtration requirements. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 269 cm Approximate priming volume: 22 mL	
50177 LIGHT SENSITIVE Administration Set	LIGHT SENSITIVE Administration Set, for the infusion of fluids and/or drugs that are light-sensitive but have no incompatibility with PVC and no particular filtration requirements. Replace the Administration Set every 72 hours or sooner as per facility protocol. Not for use with blood or blood components.
Characteristics: Approximate length: 268 cm Approximate priming volume: 21 mL	
50180 BLOOD Administration Set, 2 IV spikes	BLOOD Administration Set with two IV spikes, for the infusion of blood or blood components. Replace the Administration Set every 24 hours or sooner as per facility protocol.
Characteristics: Approximate length: 270 cm Approximate priming volume: 26 mL	
50496 EPIDURAL Administration Set, microbore tubing with yellow stripe	EPIDURAL Administration Set with micro-bore tubing and a yellow stripe. Replace every 72 hours or sooner as per facility protocol. Not for use with blood or blood components. Not for gravity use.
Characteristics: Approximate length: 271 cm Approximate priming volume: 8 mL	
50681 EPIDURAL Administration Set, microbore tubing with yellow stripe, Surety° connector	EPIDURAL Administration Set with micro-bore tubing and a yellow stripe. The Surety [*] connector enables connections to other neuraxial devices using the Surety [*] connector. Replace every 72 hours or sooner as per facility protocol. Not for use with blood or blood components. Not for gravity use.

Characteristics: Approximate length: 271 cm | Approximate priming volume: 8 mL





The Infusion station IDS is designed to accommodate from 3 to 8 aitecs[®] pumps (aitecs[®] 2016, aitecs[®] 2017, aitecs[®] 3017) and distribute mains to all the fitted pumps using single mains lead. In addition IDS can retrieve infusion information from the pumps and send it via standard Ethernet interface for indication on aitecs[®] Infusion Monitoring System (AIMS 16) or any other third party CIS, PDMS systems. It is recommended to use in

departments of anesthesiology, resuscitation and intensive care.

IDS

AIMS16 Software

aitecs[®] Infusion Monitoring System (AIMS16) is a tool for remote infusion monitoring and event aggregation. The software runs on a central console and collects information from infusion stations (IDS) through standard computer network.

Features:

- Displays topological view of monitored facility with event indication
- Provides organized information about infusions
- Shows currently active critical infusion events
- Shows a list of infusions that are close to an end
- Provides quick access to most important infusion information
- Compatible with touchscreen displays



AIMS16 software organizes information in room – bed – station – infusion fashion. Hospital facility view is divided into rooms, which contain beds. Stations are then assigned to beds and each station may have several pumps stacked on it. A patient can be assigned to each bed and it the icon in the main window is displayed accordingly.

A bed is represented as a picture in the main window. The picture indicates state of the bed – if it has a patient assigned, if it has active infusions and critical events. Clicking on bed information displays

extended information about infusions that are active on the stations assigned to the bed. Pump generated alarms and warnings are shown on the list for quick and convenient access. Each item is clickable and displays information about the bed the event occurred in.

Each infusion with remaining time less than a configurable threshold is displayed in a separate list. Each item is again clickable and displays extended information about the bed the station with the infusion is assigned to.





Accessories



Mounting holder for ambulance cars

B6090003 - Mounting holder for secure fixation of SP-12S Pro, SEP-21S Plus in ambulance cars required by EN 1789

B6090006 - Mounting holder for secure fixation of aitecs® 2016 in ambulance cars required by EN 1789



AC power lead - EU

V5570010 - AC power lead for use with SP-14S/12S Pro and SEP-21S Plus **V5570016** - AC power lead for use with aitecs[®] 2016, aitecs[®] 2017 and aitecs[®] 3017



AC power lead - UK

V5570011 - AC power lead for use with SP-14S/12S Pro and SEP-21S Plus **V5570018** - AC power lead for use with aitecs[®] 2016, aitecs[®] 2017 and aitecs[®] 3017

USB cable

Q0000155 - USB cable for use with aitecs[®] 2016 **Q0000156** - USB cable for use with aitecs[®] 2017 and aitecs[®] 3017

RS232 cable

B6650060 - RS 232 extension cable for use with SP-14S/12S Pro and SEP-21S Plus

12V DC cable

B6650061 - 12V DC extension cable for use with SP-14S/12S Pro and SEP-21S Plus **B6650035** - 12V DC extension cable for use with aitecs[®] 2016 and aitecs[®] 2017

Nurse Call cable

B6650062 - Nurse Call cable for use with SP-14S/12S Pro and SEP-21S Plus **B6650034** - Nurse Call cable for use with aitecs[®] 2016 and aitecs[®] 2017 **B6650063** - Nurse Call cable for use with aitecs[®] 3017

aitecs[®] 2016 Event History

FAAA2716 - aitecs[®] 2016 Event History utility allows downloading and saving to database four types of event logs which are recorded in the memory of the pump while it is working. Moreover, Event History utility allows reviewing events and printing the report.

aitecs® PCA Administration Database

FAA2614 - PCA Administration Database is intended for the Event log data processing of the PCA syringe infusion pump SP-14S. The software allows to download event log to the computer via RS232 cable, identify event, split the records into single patient treatment sessions and create session database. PCA administration database represents results in graphical and text form and enables to print the session report.

aitecs[®] 2016 Configuration Utility

FAAA2718 - The software allows to configure parameters via USB cable and adapt configuration for each care unit. aitecs[®] 2016 Configuration Utility is the best tool to customize drug libraries using Drug Error Reduction System (DERS). The easy to use system reduces set-up time and limits the risk of dose errors.

Infugard[®]

Infugard® can be used for creating, managing and uploading configurations (parameters and protocol library) to pumps aitecs® 2016, aitecs® 2017 and aitecs® 3017. Infugard also can be used for retrieving pump history/logs (Event log, Safety log, Service log, Key log).

Notes





UAB Viltechmeda Mokslininku 6 LT-08412 Vilnius Lithuania tel +370 5 277 6745 fax +370 5 276 3867

MD-10503 Rev.0