

CODAN Volumetric Infusion Pumps

A717V, A718V A717V Plus, A718V Plus

Fact Sheet

Version February 2024 For Firmware version 5.51









Technical Data	Description	Remarks
Performance Data		
Product variants	A71XV, A71XV Plus	
Dosing units	g, mg, μg, ng, IU, mmol	Per hour, minute, kilogram, day
Flow rate	0.1 to 1,200 ml/h	Steps of 0.1 ml/h from 0.1 to 999.9 ml/h, steps of 1 ml/h from 1,000 to 1,200 ml/h
Infusion volume	0.1 to 9,999 ml	Steps of 0.1 ml from 0.1 to 999.9 ml volume, steps of 1 ml from 1,000 to 9,999 ml volume.
Infusion time	1 min to 99 h 59 min	Steps of 1 min
Programming	Rate in ml/h, volume in ml, duration in h and min	
Automatic rate calculation	Based on the volume and time	
Bolus administration	Manually or automatically	With/without dose limit. Limits can be set via MED DB
Bolus rate/volume	0.1 ml to 1,200ml/h/0.1 to 999 ml	Without infusion interruption. Bolus Rate must be adequate for the selected volume. A bolus delivery lasting less than 3 seconds may be inaccurate.
Purging of the infusion line	0.1 ml/h to 1,200ml/h	
Accuracy of delivery rate	±5% Bolus < 2 ml or rate < 2 ml/h accuracy may deviate	With CODAN ARGUS qualified administration sets in compliance with IEC-60601-2-24. Note: Measured with 50cm water column in supply line
Error volume	0,66ml	
Keep Vein Open (KVO) rate	Off or 0.1 to 10.0 ml/h	Depending on infusion rate; deactivation possible
Standby mode	1 to 60 min	
History and Interfaces		
History and event log	Up to 1,000 events	With timestamp
Nurse call	Connection to the hospital nurse call system	Max. DC 24 V / 0.2 A. Electrically isolated Configurable pulse
RS-232 interface	Connection to ARGUSservice and power supply when mounted on P-docking station	
Ethernet and Wi-Fi	Health Level 7 (HL7), IHE Profiles: DEC, CT, SN	Wi-Fi optional
Bluetooth	Secure 1 to 1 connection	For Patient ID scan and Barcode Assisted Infusion (BAI) Workflow
Operation		
Applications	Intended for use on adults, paediatric patients, and neonates requiring continuous or intermittent delivery at precisely-controlled infusion rates of liquid medications, parenteral nutrition solutions, blood and blood products by intravenous infusion. The system is intended for patients who require transfusion (Haematology), infusion therapy for cancer (chemotherapeutic agents), pain management, and parenteral nutrition	
Display type	Monochrome LCD, 240 x 64 Pixel	Adjustable brightness
Night Mode	Automatic dimming of display and front panel LED brightness	
Display contents	Values and units for infusion rate, infused volume, target volume (VTBI), infusion time, remaining infusion time, battery capacity, pressure level. Text and symbols for high and low priority alarms, medication name, medication setup, bolus delivery and information menu	
Menu overview	Intuitive and configurable for specific applications	Available in 18 languages
Menu configuration	By means of ARGUS <i>service</i> software. Temporary settings by the user	Customisable to user needs
Administration Sets	With CODAN standard sets, Cyto-Sets and other qualified administration sets	Tube materials: PVC, PVC free, No DEHP
	Standard operation: adjustable infusion rate, infusion volume, infusion time.	Medication database (MED DB) required. Up to 256 drugs with safety limits and dose calculation configurable
Infusion modes	Dose calculation: infusion based on supported dosing units	
	Barcode Assisted Infusion (BAI) workflow with E-VTBI and Rinsing mode	Optional for A717V Plus and A718V Plus only

Safety		
Pressure release	Automatic pressure release after occlusion	
Air bubble detection	From 50 to 1,000 μg (individual air bubbles); configurable from 100 to 2,000 μg (accumulated air bubbles)	
Drop detector	10 to 64 drops/ml	In transport mode, the alarm "TOO MANY DROPS" is less sensitive
Alarm	Occlusion (up and downstream), air bubbles, pressure out of range, no drops, too many drops, end of infusion, empty battery, door open, technical error	
Low prio-alarm	Infusion near end (VTBI/time), pump unused, low battery	
Key lock	Activation/deactivation via numerical code	
Sound pressure level range	Between 45dB(A) and 75dB(A) within a 1 m radius	
Pressure limit for occlusion	200 to 1,200 mbar	Configurable. Steps of 10 mbar. Units also in mmHg, kPa, cmH2O, Psi
DERS (Dose Error Reduction System): Medication database	MED DB medication library	Optional on request
Overinfusion under single fault conditions	Maximum 0.66 ml	
Power Supply		
Battery	1,800 mAh, NiMH	
Battery operation	6 hours at 25 ml/h, 5.5 hours at 25 ml/h for the Plus 2 hours at 1200 ml/h for all variants	
Battery charging time	< 6 hours in standby mode (at room temperature)	
Mains power supply	100 to 240 V, 25 VA, 50 - 60 Hz	
Product Specification		
Dimensions	190 x 160 x 130 mm (W x L x D)	Without combination clamp
Housing	ASA high-performance plastic	
Operating/medication temperature	5°C to 40°C/18°C to 30°C	
Temperature for storage/transport	0°C to 40°C/-20°C to 60°C	
Relative humidity	20% to 90% without condensation	
Atmospheric pressure	750 to 1,060 mbar (operation); ≤ 2,300 m above sea level 500 to 1,060 mbar (storage and transport); ≤ 5,500 m above sea level	
Weight with battery	1.78 kg	Including power supply unit
Maintenance	Safety Standard Check (SSC): every 24 months or after 10,000 operating time	
Compliance		
IP Code	IP22	Protection against ingress of solid foreign objects with a diameter of ≥ 12.5 mm, and ingress of water in a position with 15° inclination
Wi-Fi and Bluetooth Frequency	Single-band 2.4 GHz	
Protection class	II	Electric shock protection according to IEC 60601-1
Applied part type	CF	Defibrillation proof applied parts according to IEC 60601-1
Electrical safety	IEC 60601-1, IEC 60601-2-24	
Electromagnetic compatibility	IEC 60601-1-2	
Usability	IEC 60601-1-6, IEC 62366	
Alarm systems/SW life cycle	IEC 60601-1-8, IEC 62304	
MDD classification	llb	In compliance with Council Directive 93/42/EEC and (EU) 2017/745
Accessories		
Docking stations	CODAN docking stations in three sizes A300P, A500P, A600P	
Drop detector	CODAN ARGUS Drop Detector	
Barcode Scanner	Bluetooth Scanner Zebra DS8178-HC	

CODAN Worldwide

CODAN is known internationally as a manufacturer and supplier of medical transfer systems. The CODAN Companies have more than 1500 employees around the world.

The name CODAN is synonymous with reliability, quality and precision based on the know-how and experience gained from more than 60 years of research and development. Company-owned production facilities and sales companies around the world are a guarantee for efficient production, a tight-knit sales network and a first-class service for customers in the healthcare sector.

CODAN Product range

- · Infusion sets
- Transfusion sets
- · Extension lines and manifold connectors
- · Infusion and transfusion accessories
- Infusion filters and filter systems
- Neonatology/Paediatric products
- · Withdrawal, preparation and administration systems
- CODAN CYTO[®]
- Chemoprotect[®] products
- Single use syringes
- · Invasive blood pressure monitoring systems
- Infusion pumps
- Other CODAN Products

Compliance of the established quality management systems with the provisions of EN ISO 13485, the Council Directive 93/42/EEC and/or Regulation (EU) 2017/745 has been certified by the relevant, competent notified bodies:

TÜV SÜD Product Service GmbH

CODAN Medizinische Geräte GmbH 23738 Lensahn, Germany CODAN pvb Critical Care GmbH 85661 Forstinning, Germany CODAN US Corporation · Santa Ana, CA 92704, USA CODAN ARGUS AG · 6340 Baar, Switzerland

Presafe Denmark A/S

CODAN Medical ApS · 4970 Rødby, Denmark



Manufacturer

CODAN ARGUS AG Oberneuhofstrasse 10 · 6340 Baar, Switzerland Tel. +41 (0) 41 · 785 09 44 · codan@codanargus.com www.codancompanies.com

The decisive connection



CODAN Companies

CODAN Medizinische Geräte GmbH · Deutschland

CODAN pvb Critical Care GmbH · Deutschland CODAN pvb Medical GmbH · Deutschland

CODAN US Corporation · California · USA

CODAN 11, S.A. · Portugal

CODAN Inc. · California · USA

CODAN TRIPLUS AB · Sverige

CODAN Limited · Great Britain

CODAN FRANCE Sarl · France

CODAN Medical AG · Schweiz CODAN ARGUS AG · Schweiz

CODAN Medical GmbH · Österreich

CODAN MEDITECH s.r.o. · Česká republika

CODAN Medical ApS · Danmark CODAN DEHA ApS · Danmark

CODAN BV · Nederland CODAN s.r.l. · Italia

CODAN NORGE AS · Norge

EC REP

CODAN pvb Critical Care GmbH Römerstraße 18 · D-85661 Forstinning Tel. +49 (0) 81 21 · 98 02 0 · codan@codanpvbcc.de