

CODAN Syringe Pumps



A616S InCare
A616S TCI

Fact Sheet
Version Aug 2018

en



Technical Data	Description	Remarks
Performance Data		
Product variants	InCare, TCI	
Dosing units	g, mg, µg, ng, IU, mmol	Per hour, minute, day, kilogramme
Infusion rate	0.1 to 1500 ml/h	Steps of 0.1 ml/h, modification without infusion interruption
Infusion volume	0.1 to 999.9 ml/1000 to 9999 ml	Steps of 0.1 ml/steps of 1.0 ml
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	On the basis of volume and time	
Bolus administration	Manual or automatic	
Bolus rate	0.1 to 1500 ml/h	
Bolus volume	0.1 to 50 ml	Depending on syringe size
Purging of the infusion line	0.1 to 1500 ml/h	Depending on syringe size
	Purge max volume: 1000 to 5000 µl/h	► see the service manual
Accuracy	±2% (at ≥ 1 ml/h)	With CODAN qualified syringes (list on request)
(According to IEC 60601-2-24)	±5% (at ≥ 1 ml/h)	With customer qualified syringes
Error volume	0.5 to 1.2 ml	Depending on the syringe
KVO (Keep Vein Open) rate	Off or 0.1 to 5.0 ml/h	Configurable
Alarm PUMP UNUSED	Off or 1 to 60 min	Time until the alarm is triggered
History and Interface		
History and event log	Up to 1'000 events	With time stamp
Nurse call	Connection to the central system	24 V/0.2 A, configurable pulse, potential-free
RS-232 interface	Configuration interface	For use with ARGUSservice
Communication interface	Connection to docking stations	Via docking stations, connection to Ethernet is possible (i.e. PDMS)
Operation		
Display type	Monochrome LCD, 98.4 x 26.2 mm, 240 x 64 Pixel	Adjustable brightness
Night Mode	A feature to automatically dim the brightness of the device backlight and front panel LEDs.	
Menu overview	Intuitive and configurable for specific applications	Available in 18 languages, overview of infusion data
Display contents	Flow rate in units and ml/h, infused volume, target volume (VTBI), infusion time, remaining infusion time, battery capacity, pressure level, text and symbols for alarms and pre-alarms, medication name and medication setup, bolus delivery and information menu etc.	
Menu configuration	By means of ARGUSservice software/temporary settings by operator	Client-specific configuration possible
Syringes	10 ml, 20 ml, 30 ml, 50/60 ml	Automatic identification of CODAN ARGUS approved syringes, permanent display of the syringe name
Infusion modes	Standard operation: adjustable infusion rate, infusion volume, infusion time Dose calculation: infusion based on supported dosing units TIVA (Total Intravenous Anesthesia): patient weight (if applicable), induction dose (ug), induction time, maintenance rate (µg/h) TCI (Target Controlled Infusion): Minto model for Remifentanyl, Schnider model for Propofol; patient data: gender, age, height, weight	Medication database is required Available in product variant CODAN A616S TCI
Safety		
Pressure release	Automatic pressure release after occlusion	
Alarms, pre-alarms	Visual and audible signals for rapid detection	
Alarm types	Syringe position, empty syringe, pressure too high, empty battery, syringe or battery almost empty, standby, limit exceeded etc.	
DEFI proof	Protection against electrical shock from defibrillator	
Key lock	Activation/deactivation via numerical code	
Pressure limit for occlusion	200 to 1200 mbar ±200 mbar (CODAN qualified syringes)	Steps of 10 mbar
DEERS: Medication database (Dose Error Reduction System)	On request	
Power Supply		
Battery	1800 mAh, NiMH	Maintenance-free
Battery operation	9 hours at 5 ml/h, 8 hours at 10 and 25 ml/h	
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	320 x 100 x 180 mm (W x L x D)	
Housing	ASA high performance plastic	Including clamp for pole fixation, expandable for rails
Operating temperature	5 to 40°C	
Temperature for storage	0 to 40°C	
Temperature for transport	-20 to 60°C	
Relative humidity	20 to 90% non-condensing	
Atmospheric pressure	Operation: 750 to 1060 mbar Storage and transport: 500 to 1060 mbar	
Weight with battery	2.0 kg	Including power supply unit
SSC (safety standard check)	Every 24 months or after 10000 operating hours	
Compliance		
IP protection class	IP22	Drop-protected in horizontal position up to ±15° inclination
Protection class	II	Electric shock protection according to IEC 61140
Applied part type	CF	According to EN 60601-1
MDD classification	IIb	
Electrical safety	EN 60601-1 (Ed. 3.1), EN 60601-8, EN 60601-2-24, EN 60601-1-6, EN 62304	
Electromagnetic compatibility	EN 60601-1-2 (Ed. 4)	
Certification CODAN ARGUS AG	ISO 13485	
Device CE mark	CE 0123	
Accessories		
Docking stations	ARGUS docking stations in 3 sizes for different combinations	Version M: monitoring (PDMS link) + power supply Version P: power supply
Attachment system	Combination clamp for pole and rail systems	
Software	ARGUSservice	Program for update, maintenance and configuration



Manufacturer
CODAN ARGUS AG
 Oberneuhofstrasse 10 · 6340 Baar, Switzerland
 Tel. +41 (0) 41 785 09 44 · Fax +41 (0) 41 785 09 40
 www.codanargus.com

