

DI GI FLAME CO MP AC T
flame photometer
for clinical and industrial
applications
Model DV-704



AUTOMATIC FLAME ANALYZER for the simultaneous determinations of Sodium (Na) Potassium (K) and Lithium (Li) on serum, urine or different samples, with built-in 1:100 peristaltic diluter and data printer

- Pre-set and free programs. Signal integration methods with or without internal standard.
- Digital displays of final results in concentration units,
- Dot printer.
- Automatic dilution directly from sample to flame.
- Simultaneous determination of Na and K with internal standard of Li.
- Automatic curve correction.
- Automatic instrument calibration and zero.
- Automatic Flame Ignition.
- Positive samples sequence identification with STAT possibility.
- Safety: valve and controls.
- Fuel gas: GPL (propane+butane).
- Support gas: compressed air.
- Supplied with: -Membrane air compressor, - 12 glass cup for samples - Gas and drain tubes - Power cord.
- Instruction and service manual. -Power requirements: 220 V, 50 Hz. or 1 10V50/60 Hz.

DV 700-3 Accessory operation kit including:

- 1 Gas pressure valve
- 4x500 ml bottles of Li working solution (Li⁺=15 mEq/l)
- 1x100 ml standard solution for Na⁺ and K⁺ analyses in serum samples Na=140 mEq/l; K=5.0 mEq/l)
- 1x100 ml standard solution for Na⁺ and K⁺ analyses in urine samples (Na= 100 mEq/l; K=1 00 mEq/l)
- 1x100 ml concentrated Li working solution (Li⁺:1 500mEq/l)
- 1x100 ml standard solution (Li=0 mEq/l) - 1x500 ml standard solution (Li=3 mEq/l) - 1x500 ml Working solution (K=4 mEq/l)
- Moisture condenser to connect to the air compressor

Technical Specification

Sample volume	: 50µl
Dilution	: Na, K 1:100 Li 1:20
Concentration of standard calibration:	Serum analysis Na 140 mEq/l; K 5.0 mEq/l; Li 3 mEq/l. Urine analysis Na 100 mEq/l; K 100 mEq/l.
Internal Standard	: Na , K : Li = 15 mEq/l; Li : K = 4 mEq/l.
Accuracy	: < 1% : < 1%
Carry over	: L.P.G. , Propane or Butane.
Fuel gas	: compressed air 14l/min.
Support gas:	: Gas stopped in case of power
Safety device	

OPTION:

Automatic sampler for 20 samples. standardizes and zeroes the instrument automatically

Flame Photometer DIGIFLAME COMPACT DV 704 TECHNICAL DATA

OPTICAL SYSTEM	Three measuring channels with filters narrow band 589nm 671nm 766 nm
SOURCES:	Flame
DATA MANAGER	microprocessor
SECURITY	Internal valve stops gas exit when air pump is off. Air pump is automatically arrested in case of lack of flame.
DILUTOR	Rate 1 a 100
PRINTER	Thermal printer 20 columns
POWER	
ELECTRICAL REQUIREMENT	220V 50Hz / 110V 50/60HZ
GAS	Gpl
GAS ADJUSTMENT	Two pressure valves, with adjusting knob, guarantee a constant pressure of air and gas.
INTERNAL SOFTWARE SPECIFICATIONS	
FIXED PROGRAM	Three fixed programs for: Na e K in Serum with internal standard of Li. Na e K in urine with internal standard of Li. Li in Serum internal standard of K.
FREE PROGRAM	It is possible to analyze different kind of samples with or without internal standard, either automatic or manual dilution.
ANALYTICAL DATA (FIXED PROGRAM)	Na 0 - 250 mEq/l (0-5750 ppm) K 0 - 10 mEq/l (0-390 ppm) (program serum) K 0 - 200 mEq/l(0-7800 ppm) (program urine) Li 0 - 10 mEq/l
PRECISION	Na \pm 2 mEq/l K \pm 0.2 mEq/l ((program serum) K \pm 2 mEq/l (program urine) Li \pm 0.2 mEq/l
ANALYTICAL DATA (FREE AND VARIABLE PROGRAM)	Depending on dilution and standard
CONFORMITY	IEC 610104 Electromagnetic compatibility 89/336/EEC- CE marking

REA GENTS

CODE	DESCRIPTION
DV-626	STANDARD SOLUTION FOR NA E K IN SERUM SAMPLES (140/5). 1BTLX100 ML
DV-627	STANDARD SOLUTION FOR NA E K IN URINE SAMPLES (100/100). 1BTL X100 ML
DV-628	K WORKING SOLUTION (4 MM/L). 1X500 ML
DV-629	CONCENTRATED LI SOLUTION (150 MM/L) 1BTL X500 ML.
DV-630	STANDARD SOLUTION LITHIUM "O". 1BTLX500 ML.
DV-631	LI DILUTED WORKING SOLUTION (15 MM/L) READY TO BE USED. 4BTLX500 ML
DV 633	STANDARD SOLUTION LITHIUM "3". 1BTLX500 ML
DV 639	LITHIUM CONCENTRATED 1500 mEq/l 1 bt 1 100 ml

2400 ANALYSES REAGENTS		QTY
DV 626	STANDARD SOLUTION FOR NA E K IN SERUM SAMPLES (140/5). 1BTLX100 ML	3
DV 627	STANDARD SOLUTION FOR NA E K IN URINE SAMPLES (100/100). 1BTL X100 ML	3
DV 628	K WORKING SOLUTION (4 MM/L). 1X500 ML	4
DV 630	STANDARD SOLUTION LITHIUM "O". 1BTLX500 ML.	2
DV 639	LITHIUM CONCENTRATED 1500 mEq/l 1 bt 1 100 ml	4
DV 633	STANDARD SOLUTION LITHIUM "3". 1BTLX500 ML	2
R70422031	CAPILLARY TUBE FOR IN VITON FOR PERISTALTIC PUMP PCS 2PZ	2

Item	MOD	Volume mm l/w/h	Weight Kg	Qty	Total box	Total Weight
1	DV 704	700x420x500	30	1	1	KG. 35

DIG IFLAME 200 0
flame photometer
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Model DV-710



FLAME ANALYZER for the simultaneous determinations of
Sodium (Na) Potassium (K) and Lithium (Li) on serum, urine or different samples

- Pre-set and free programs. Signal integration methods with or without internal standard.
- Digital displays of final results in concentration units.
- Simultaneous determination of Na and K with internal standard of Li.
- Automatic curve correction.-Automatic instrument calibration and zero.
- Automatic Flame Ignition.
- Positive samples sequence identification with STAT possibility.
- Safety: valve and controls.
- Fuel gas: GPL (propane+butane). -
- Support gas: compressed air.
- Supplied with: -Membrane air compressor, - 12 glass cup for samples - Gas and drain tubes - Power cord.
- Instruction and service manual. -Power requirements: 220 V, 50 Hz. or 1 10V50/60 Hz.

DV 700-3 Accessory operation kit including:

- 1 Gas pressure valve
- 4x500 ml bottles of Li working solution (Li⁺=15 mEq/l)
- 1x100 ml standard solution for Na⁺ and K⁺ analyses in serum samples Na=140 mEq/l; K=5.0 mEq/l)
- 1x100 ml standard solution for Na⁺ and K⁺ analyses in urine samples (Na= 100 mEq/l; K=1 00 mEq/l)
- 1x100 ml concentrated Li working solution (Li⁺:1 500mEq/l)
- 1x500 ml standard solution (Li=0 mEq/l) - 1x500 ml standard solution (Li=3 mEq/l) - 1x500 ml Working solution (K=4 mEq/l)
- Moisture condenser to connect to the air compressor

Technical Specification

- Sample volume : 50µl
- Concentration of standard calibration: Serum analysis Na 140 mEq/l; K 5.0 mEq/l; Li 3 mEq/l. Urine analysis Na 100 mEq/l; K 100 mEq/l.
- Internal Standard : Na , K : Li = 15 mEq/l; Li : K = 4 mEq/l.
- Accuracy : < 1%
- Carry over : < 1%
- Fuel gas : L.P.G. , Propane or Butane.
- Support gas: : compressed air 14l/min.
- Safety device : Gas stopped in case of power failure and air flow interruption

Flame Photometer DIGIFLAME 2000 DV 710 TECHNICAL DATA

OPTICAL SYSTEM	Three measuring channels with filters narrow band 589nm 671nm 766 nm
SOURCE	Flame
DATA MANAGER	Microprocessor
SECURITY	Internal valve stops gas exit when air pump is off Air pump is automatically arrested in case of lack of flame
POWER	
ELECTRICAL REQUIREMENT	220V 50Hz / 110V 50/60HZ
GAS	Gpl
GAS ADJUSTMENT	Two pressure valves, with adjusting knob, guarantee a constant pressure of air and gas.
INTERNAL SOFTWARE SPECIFICATIONS	
FIXED PROGRAM	Three fixed programs for: Na e K in Serum with internal standard of Li. Na e K in urine with internal standard of Li. Li in Serum internal standard of K.
FREE PROGRAM	It is possible to analyze different kind of samples with or without internal standard.
ANALYTICAL DATA (FIXED PROGRAM)	Na 0 - 250 mEq/l K 0 - 10 mEq/l (program serum) K 0 - 200 mEq/l(program urine) Li 0 - 10
PRECISION	Na \pm 2 mEq/l K \pm 0.2 mEq/l ((program serum) K \pm 2 mEq/l (program urine) Li \pm 0.2 mEq/l
ANALYTICAL DATA (FREE AND VARIABLE PROGRAM)	Depending on dilution and standard
CONFORMITY	IEC 6101 0-1 Electromagnetic compatibility 89/336/EEC- CE marking

REAGENTS

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DV-628	K WORKING SOLUTION (4 MM/L). 1X 500 ML
DV-629	CONCENTRATED LI SOLUTION (150 MM/L) 1BTL X500 ML
DV-630	STANDARD SOLUTION LITHIUM "O". 1BTLX500 ML.
DV-631	LI DILUTED WORKING SOLUTION (15 MM/L) READY TO BE USED. 4BTLX500 ML
DV 633	STANDARD SOLUTION LITHIUM "3". 1BTLX500 ML
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DV 628	K WORKING SOLUTION (4 MM/L). 1X500 ML		4
DV 630	STANDARD SOLUTION LITHIUM "O". 1BTLX500 ML.		2
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