

TIVA8 LAB High-End Washers for Laboratories

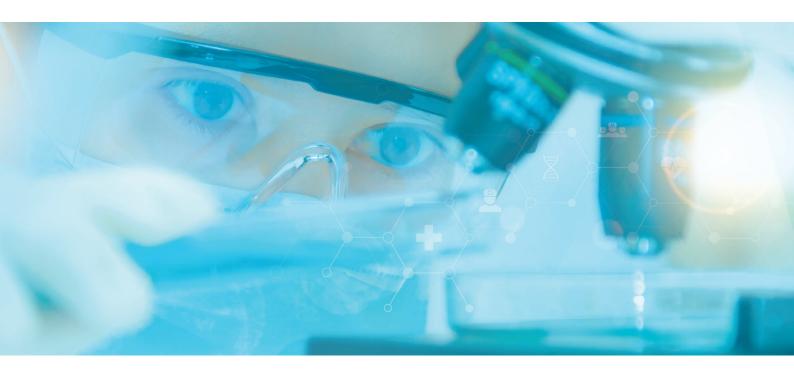
Bringing **95 Years of Professionalism** into your laboratory





Made with Over 95 Years of Experience

Tuttnauer's sterilization and infection control solutions are trusted by hospitals, **laboratories**, and clinics in more than 140 countries. For over 95 years Tuttnauer has been passionate about delivering a complete sterilization solution in the healthcare and life science industries. We are proud to have installed over 350,000 sterilization and infection control products around the world.



Welcome to the **TIVA8** Lab Washer Series

Complete laboratory process solutions

Tuttnauer is proud to introduce its lab washer series. This product line corresponds with Tuttnauer's vision, to provide complete end to end solutions for reprocessing needs to all the industries it serves, in particular for laboratories. Incorporating a washer disinfector in your lab awards maximum flexibility, sustainability, and an efficient driven solution for glassware treatment.

Tuttnauer's **TIVA8** Lab line Washers contain unrivalled levels of efficiency that deliver on water and energy savings. The high-quality system is specifically designed for research intensive laboratory settings that offer automated cleaning and drying of typical laboratory glassware, as well as miscellaneous plastic items used in research facilities.

Each model suits different needs, and all Tuttnauer lab washers offer efficient chamber sizes within a compact footprint. The flexibility of each machine is supported by intelligent controls and programmable cycles to clean most residues. Tuttnauer racks, baskets and accessories also enhance productive and effective wash cycles.



Simple Operation & Process Monitoring

- Touch keyboard with color 3.5" LCD graphic display
- Alarm-check system
- Connectivity: Data transfer via USB and RS232
- Convenient add-on printer
- Washer RePortal (optional)
- User pin management (optional)



Advanced Control and Warning System

- Microcontroller managing multiple sensors data to support smooth efficient and reliable operation
- Chemical dosing control
- Advanced warning system
- Real-time indication of water level and quality



Easy to Clean and Maintain <u>Process Monitoring</u>

- The only washer with a water-emptying total system (ETS)
- Easy-to-remove and wash spray arms
- Long-lasting components require minimal servicing



Optimal Results

- Up to 40 standard and customized programs
- Water quality monitoring
- Validation of every cycle using continuous water pressure monitoring
- Quick drying phases due to a steam condenser system
- Uniform forced air drying, dust blocking (HEPA filter is optional)
- Accelerated heating using an integrated boiler (optional)
- Reduced program times and electricity consumption using hybrid heating system (optional)
- Water softener system (optional)
- Conductivity probe (optional)



Highest Design Standards

State of the art quality:

- Chemical-resistant double glass
- Stainless steel design

TIVA8-1ML | TIVA8-X-1ML | TIVA8-XE-1ML

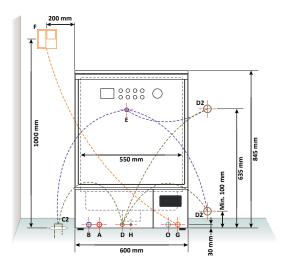
Under-Counter Washer

Chamber Capacity - 165 Liter

Door resistant to aggressive chemicals Ergonomic handle Durable and transparent glass door (TIVA8-1ML) or Stainless steel (TIVA8-X-1ML | TIVA8-XE-1ML) A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

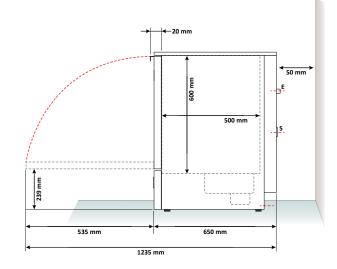


Dimensions	TIVA8-1ML	TIVA8-X-1ML	TIVA8-XE-1ML
External dimension (WxDxH): mm	600x650x845	600x650x845	600x650x845
Chamber dimension (WxDxH): mm	550x500x600	550x500x600	550x500x600



Legend

- **A** Hot water connection male-thread G_{4}^{3} " (tube G_{2}^{1} ")
- **B** Cold water connection male-thread $G^{\frac{3}{4}"}$ (tube $G^{\frac{1}{2}"}$)
- C2 Drain Ø1" ½ (DN40) hose connection 1" (25mm) (at floor)
- **D** Drain connection to the machine
- D2 Drain Ø1" ½ (DN40) hose connection 1" (25mm) (at wall)
- **E** Output connection capacitor discharge machine



- F Omnipolar magneto switch with a circuit breaker
- G Electrical connection box
- H Equipotential clamp
- **O** Deionized water connection male-thread $G^{\frac{3}{4}}$ " (tube $G^{\frac{1}{2}}$ ")
- S Steam outlet exhaust

TIVA8-WD-1ML | TIVA8-WD-XE-1ML

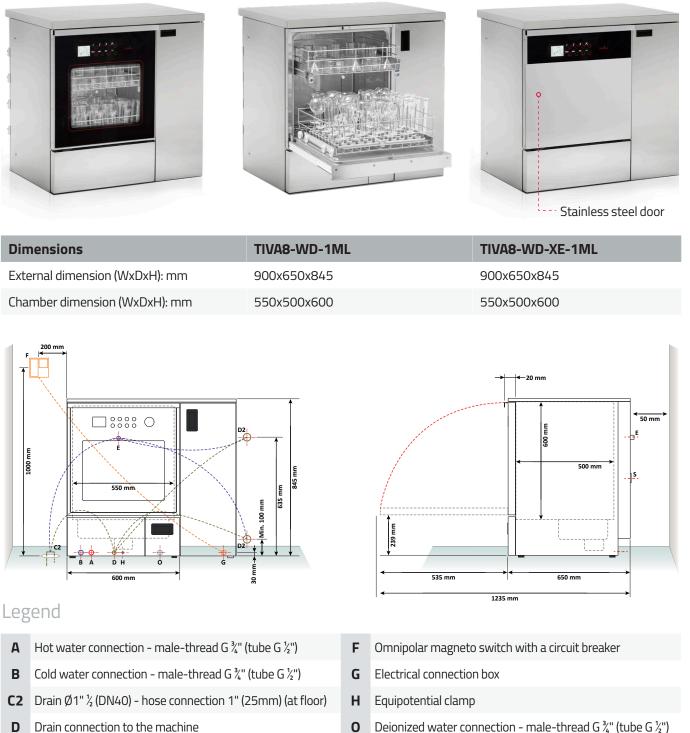
Under-Counter Washer Chamber Capacity - 165 Liter

Door resistant to aggressive chemicals - Ergonomic handle. Durable and transparent glass door (TIVA8-WD-1ML) or Stainless steel (TIVA8-WD-XE-1ML).

A wide range of racks, nozzles and accessories complete these machines, suitable to wash and dry a wide variety of laboratory glassware.

Detergent storage compartment

Located in the side panel with a handle to allow access to it.



0

S

Steam outlet exhaust

- D Drain connection to the machine
- D2 Drain Ø1" ½ (DN40) hose connection 1" (25mm) (at wall)
- Output connection capacitor discharge machine Ε

Technical features

• Standard + Optional / Not available

Features	TIVA8-1ML	TIVA8-X-1ML	TIVA8-XE-1ML	TIVA8-WD-1ML	TIVA8-WD-XE-1ML
Standard Features					
Certified according to 2006/42/EC, 2014/35/EU, 2011/65/EU, 2014/30/EU, EN61010-1, EN 61326-1	0	0	0	0	0
Pluming system, designed to isolate the potable water pipeline system (water gap) as prescribed by EN 1717	0	0	0	0	ο
Wash chamber made of high quality stainless steel, AISI 316L (EN 1.4404)	0	0	0	0	0
Manual door with interlock	0	0	0	0	0
USB SLAVE interface for PC	0	0	0	0	0
USB HOST interface for FLASH DRIVE	0	0	0	0	0
Interface for external printer or data connection exchange	0	0	0	0	0
RS232 Interface for external cycles documentation	0	0	0	0	0
Touch panel with color graphic display	0	0	0	0	0
Parallel Interface for printer	0	0	0	0	0
Forced air drying	0	0	/	0	/
Hot/Cold water connection	0	0	0	0	0
Optional Features					
HEPA H14 filter	+	+	/	+	/
Conductivity probe	+	+	+	+	+
Cold/hot water softener system:	+	+	+	+	+
Wash chamber LED light	+	/	/	+	/
Demineralized water connection	+	+	+	+	+
Spray arm monitor	+	+	+	+	+
External printer for process-documentation	+	+	+	+	+
Technical features	TIVA8-1ML	TIVA8-X-1ML	TIVA8-XE-1ML	TIVA8-WD-1ML	TIVA8-WD-XE-1ML
Max pump flow rate	370 L/min	370 L/min	370 L/min	370 L/min	370 L/min
Max drying fan flow rate with filter	180 m³/h	180 m³/h	-	180 m³/h	_
Max absorbed power *	6.2 kW	6.2 kW	6.2 kW	6.2 kW	6.2 kW
Max number of dosing pumps for chemicals with flowmeters	4	4	4	4	4
Chemical tank capacity	5 L	5 L	5 L	5 L	5 L

The reference values are based on a voltage of 230 V between Phase and Neutral (between Phase and Phase in three-phase versions without Neutral) with a possible variance between -5 and +10%.

* Max absorbed power varies for each voltage. Please check the configuration data-sheet for exact figures





TIVA8-1ML | TIVA8-X-1ML | TIVA8-XE-1ML TIVA8-WD-1ML | TIVA8-WD-XE-1ML

RACKS

Code	Image	Description			
119905130		TL130 LAB. LOWER RACK Washing rack positioned on the lower level, basic versions Suitable for washing the following glassware: $\overbrace{U}_{BREAKERS} \qquad \overbrace{UGS} \qquad \overbrace{U}_{MUGS} \qquad \overbrace{U}_{BUCKETS} \qquad \overbrace{CANS} \qquad \overbrace{U}_{J}_{J}_{J}$ Internal loading dimensions WxD: 500x485 mm. Rack external dimensions WxDH: 525x502x148 mm.	on IRS FUNNELS	Powder FUNNELS	IMHOFF CONES
119905139		TL139 LAB. LOWER RACK 195 POS. Washing rack positioned at the lower level, max. nozzles positionable: 195 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 195 56 41	Ø max glassware 30 mm 57 mm 70 mm	Usable nozzles Ø 2,5 mm Ø 2,5/4 mm All
119905125		TL125 LAB. LOWER RACK 110 POS. Washing rack positioned at the lower level, max. nozzles positionable: 110 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 110 56 41	Ø max glassware 40 mm 57 mm 70 mm	Usable nozzles Ø 2,5 mm Ø 2,5/4 mm All
119905140		TL140 LAB. LOWER RACK 72 POS. Washing rack positioned at the lower level, max. nozzles positionable: 72 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 72 56 41	Ø max glassware 50 mm 57 mm 70 mm	Usable nozzles Ø 2,5 mm Ø 2,5/4 mm All
119905141		TL141 LAB. LOWER RACK 56 POS. Washing rack positioned at the lower level, max. nozzles positionable: 56 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 56 41	Ø max glassware 57 mm 70 mm	Usable nozzles Ø 2,5/4 mm All
119905142		TL142 LAB. LOWER RACK 41 POS. Washing rack positioned at the lower level, max. nozzles positionable: 41 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 41	Ø max glassware 70 mm	Usable nozzles All
119905143		TL143 LAB. LOWER RACK 25 POS. Washing rack positioned at the lower level, max. nozzles positionable: 25 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 25	Ø max glassware 89 mm	Usable nozzles All

Code	Image	Description			
119905144		TL144 LAB. LOWER RACK 18 POS. Washing rack positioned at the lower level, max. nozzles positionable: 18 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 18	Ø max glassware 105 mm	Usable nozzles All
119905145		TL145 LAB. LOWER RACK 16 POS. Washing rack positioned at the lower level, max. nozzles positionable: 16 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 16	Ø max glassware 110 mm	Usable nozzles All
119905146		TL146 LAB. LOWER RACK 9 POS. Washing rack positioned at the lower level, max. nozzles positionable: 9 Rack external dimensions WxDxH: 525x497x148 mm.	N° max positions 9	Ø max glassware 150 mm	Usable nozzles All
119911019		TLO19 LAB. LOWER RACK 48 POS. PIP. Washing rack for pipettes positioned at the lower level, max pipettes can be positioned: 48 Suitable for washing the following glassware: GRADUATED PIPETTES BULB PIPETTES PASTEUR PIPETTES Rack external dimensions WxDxH: 525x497x313 mm.	Min pipette 250 mm	length Max 535	pipette length mm
119911020		TLO20 LAB. LOWER RACK 2 CASS. PIP. Pipettes washing rack positioned at the lower level, with 2 cassettes Suitable for washing the following glassware: GRADUATED PIPETTES BULB PIPETTES PASTEUR PIPETTES Rack external dimensions WxDxH: 525x497x346 mm.	Min pipette All	length Max 290	pipette length mm
119905126		TL126 LAB. UPPER RACK W/S.ARM Washing rack positioned on the upper level, with spray a Suitable for washing the following glassware: $\overbrace{U}_{BREAKERS} \overbrace{UGS}^{UGS} \overbrace{UGS}^{$			MHOFF ONES
119905132		TL132 LAB. UPPER RACK 195 POS. Washing rack positioned at the upper level, max. nozzles positionable: 195 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 195 56 36	Ø max glassware 30 mm 57 mm 74 mm	<mark>Usable nozzles</mark> Ø 2,5 mm Ø 2,5/4 mm All

Code	Image	Description			
119905131		TL131 LAB. UPPER RACK 110 POS. Washing rack positioned at the upper level, max. nozzles positionable: 110 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 110 56	Ø max glassware 40 mm 57 mm	Usable nozzles Ø 2,5 mm Ø 2,5/4 mm
			36	74 mm	All
119905134		TL134 LAB. UPPER RACK 72 POS. Washing rack positioned at the upper level, max. nozzles positionable: 72 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 72 56	Ø max glassware 50 mm 57 mm	Usable nozzles Ø 2,5 mm Ø 2,5/4 mm
			36	74 mm	All
119905135		TL135 LAB. UPPER RACK 56 POS. Washing rack positioned at the upper level, max. nozzles positionable: 56 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 56 36	Ø max glassware 57 mm 74 mm	Usable nozzles Ø 2,5/4 mm All
119905136		TL136 LAB. UPPER RACK 36 POS. Washing rack positioned at the upper level, max. nozzles positionable: 36 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 36	Ø max glassware 74 mm	Usable nozzles All
119905137		TL137 LAB. UPPER RACK 25 POS. Washing rack positioned at the upper level, max. nozzles positionable: 25 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 25	Ø max glassware 90 mm	Usable nozzles All
119905138		TL138 LAB. UPPER RACK 18 POS. Washing rack positioned at the upper level, max. nozzles positionable: 18 Rack external dimensions WxDxH: 530x483x164 mm.	N° max positions 18	Ø max glassware 105 mm	Usable nozzles All
D00643500		A126 RAISING GRID Raising grid suitable for washing racks positioned at the Grid external dimensions WxDxH: 477x456x51 mm.	upper level		
ATS238-0103		A136 STAINLESS STEEL STAND TIVA8 Stand for TIVA8-1ML, TIVA8-X-1ML, and TIVA8-XE-1ML when the machine is not installed undercounter. Suitable Stand external dimension WxDxH: 600x585x600 mm.	provide an erg for use as a d	gonomics heigh letergent stora	nt of 150 cm, ge compartment
ATS238-0104		A137 STAINLESS STEEL STAND TIVA8-WD Stand for TIVA8-WD-1ML and TIVA8-WD-XE-1ML provi machine is not installed undercounter. Suitable for use a Stand external dimension WxDxH: 900x585x600 mm.	de an ergonom s a detergent s	nics height of 1 storage compar	50 cm, when the tment





TIVA8-1ML | TIVA8-X-1ML | TIVA8-XE-1ML TIVA8-WD-1ML | TIVA8-WD-XE-1ML

NOZZELS

Code	Image	Description	Additional description
P00001002	¥	A090 NOZZLE Ø6 INT. 3-FLEX H=120 External dimensions WxH: 75x140 mm.	NOZZLE WITH FLEXIBLE INTERNAL - Ø 6 mm
P00001006	¥.	A091 NOZZLE Ø6 INT. 3-FLEX H=230 External dimensions WxH: 75x230 mm.	Nozzles Ø 6 mm with 3 flexible internal arms to block the glassware during washing, avoiding possible movements, falls and breakage of the glassware Suitable for washing the following glassware:
P00001007		A092 NOZZLE Ø6 INT. 3-FLEX H=280 External dimensions WxH: 75x280 mm.	ERLENMEYER FLASKS WIDE NECK
P00001008	×	A093 NOZZLE Ø6 C H=120 External dimensions WxH: 75x120 mm.	
P00001009	×	A094 NOZZLE Ø6 C+S H=140 External dimensions WxH: 75x140 mm.	
P00001010	×	A095 NOZZLE Ø6 C+S H=180 External dimensions WxH: 75x180 mm.	STANDARD NOZZLES - Ø 6 mm Suitable for washing the following glassware:
P00001011	×	A096 NOZZLE Ø6 C+S H=230 External dimensions WxH: 75x230 mm.	HIGH CAPACITY GRADUATED FLASKS CYLINDERS
P00001012	×	A097 NOZZLE Ø6 C+S H=280 External dimensions WxH: 75x280 mm.	

Code	Image	Description	Additional description
P00001013		A098 NOZZLE Ø6 C+INT. C.28 H=120 External dimensions WxH: 75x120 mm.	
P00001014	*	A099 NOZZLE Ø6 C+S+INT. C.28 H=140 External dimensions WxH: 75x140 mm.	
P00001015	*	A100 NOZZLE Ø6 C+S+INT. C.28 H=180 External dimensions WxH: 75x180 mm.	NOZZLE WITH RIGID INTERNAL - Ø 6 mm Nozzles Ø 6 mm with rigid bottle holder to block the glassware during washing, avoiding possible movements, falls and breakages of the glassware Suitable for washing the following glassware:
P00001016	*	A101 NOZZLE Ø6 C+S+INT. C.28 H=230 External dimensions WxH: 75x230 mm.	ERLENMEYER FLASKS WIDE NECK WIDE NECK
P00001017	*	A102 NOZZLE Ø6 C+S+INT. C.28 H=280 External dimensions WxH: 75x280 mm.	
P00001018		A103 NOZZLE Ø6 EXT. 3-FLEX H=180 External dimensions WxH: 73,5 (flex) x180 mm.	NOZZLE WITH FLEXIBLE EXTERNAL - Ø 6 mm
P00001019		A104 NOZZLE Ø6 EXT. 3-FLEX H=230 External dimensions WxH: 73,5 (flex) x230 mm.	Nozzles Ø 6 mm with 3 flexible external arms to block the glassware during washing, avoiding possible movements, falls and breakages of the glassware Suitable for washing the following glassware:
P00001020		A105 NOZZLE Ø6 EXT. 3-FLEX H=280 External dimensions WxH: 73,5 (flex) x280 mm.	ERLEN- FLAT OR ROUND FUNNELS GRADUATED FLASKS NAR- ROW NECK

Code	Image	Description	Additional description
P00001021	¥	A106 NOZZLE Ø4 C H=76 External dimensions WxH: 54x76 mm.	
P00001022	¥	A107 NOZZLE Ø4 C+S H=111 External dimensions WxH: 54x111 mm.	STANDARD NOZZLES - Ø 4 mm Suitable for washing the following glassware:
P00001023	¥	A108 NOZZLE Ø4 C+S H=176 External dimensions WxH: 54x176 mm.	HIGH CAPACITY GRADUATED FLASKS CYLINDERS
P00001024		A109 NOZZLE Ø2.5 P H=81 External dimensions WxH: 15,5x81 mm.	
P00001025		A110 NOZZLE Ø2.5 P+S H=81 External dimensions WxH: 15,5x81 mm.	
P00001026	¥	A111 NOZZLE Ø2.5 C H=51 External dimensions WxH: 32x51 mm.	STANDARD OR WITH RIGID CAP NOZZLES - Ø 2.5 mm Nozzles Ø 2.5 mm standard or with internal rigid cap for small glassworks. To block the glassware during washing, avoiding possible movements, falls and breakages of the glassware Suitable for washing the following glassware:
P00001027	¥	A112 NOZZLE Ø2.5 C H=81 External dimensions WxH: 32x81 mm.	TEST TUBES LOW CAPACITY CENTRIFUGE TUBES
P00001028	•	A113 NOZZLE Ø2.5 C H=156 External dimensions WxH: 32x156 mm.	

TIVA8-1ML | TIVA8-X-1ML | TIVA8-XE-1ML TIVA8-WD-1ML | TIVA8-WD-XE-1ML

ACCESSORIES

Code	Image	Description
D00559900		A114 CAP SCREW M8x1 Hexagon head screw with M8x1 thread To be screwed to the positions of the rack where the nozzles are not placed, to allow the passage of the washing water only in the occupied positions.
119905072		A130 TEST TUBES BASKET H=160 Test tube basket Use up to 4 baskets per cart. Suitable for washing the following glassware:
D00285200		A032 INSERT FOR PETRI DISHES Insert capacity: 30 pcs. Petri dishes. Suitable for washing the following glassware: PETRI DISHES External dimensions WxDxH: 470x240x77 mm.
D00570100	I	A115 BOTT. RIGID SUPPORT Ø33 Bottle holder Ø 33 mm for nozzles with rigid inside Ø 6 mm
D00570300	i	A116 BOTT. RIGID SUPPORT Ø45 Bottle holder Ø 45 mm for nozzles with rigid inside Ø 6 mm
467010017		A128 ADAP. MALE LUER TO M8X1 MALE THREAD Luer-Lock attachment adapter
467010018		A129 PVDF FEMALE LUER TO 3/16" HOSE BARB Hose holder for Luer-Lock attachment
467010019		A131 PVDF MALE LUER TO 3/16" HOSE BARB Hose holder for Luer-Lock attachment
467010020		A132 PVDF FEMALE LUER TO 1/4" HOSE BARB Hose holder for Luer-Lock attachment
467010021		A133 PVDF MALE LUER TO 1/4" HOSE BARB Hose holder for Luer-Lock attachment
467010022		A134 PVDF ELBOW FITTING 1/4" HOSE BARB Hose holder for Luer-Lock attachment

Did you know?

Laboratories in 142 countries around the world, are using Tuttnauer autoclaves. Boasting 95 years of industry experience, Tuttnauer delivers state of the art solutions for all laboratory types, with a product line that comes in a wide range of sizes and precise, top-level sterilization capabilities, covering all laboratory requirements.



Bulk Laboratory Autoclaves



Horizontal Laboratory Autoclaves



TLC Laboratory Autoclaves



ELV Line - Vertical Laboratory Autoclaves



EL Line - Benchtop Laboratory Autoclaves

Distributed by:





Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142 Fax : 01759 301143 sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.