Comparison of
Viamed DB3 Supramaximal Nerve Stimulator
v
MIPM TOF3D Neuromuscular Transmission Monitor

		Viamed Microstim DB3 (subjective)	MIPM TOF3D (subjective)	MIPM TOF3D (objective) 3-dimensional acceleromyography
Stimulation modes				
TOF - Train of Four	Single	✓	✓	
	Continuous, every 15 seconds.		✓	
TOFs - Train of Four	Stimulation interval adjustable between 1 to 60 minutes.		✓ Stimulation mode can be removed/added via the setup menu.	
PTC - Post Tetanic Count		✓	✓	
Single Twitch stimulation	Single	1 Hz	Default can be switched between **1 Hz** and **0.1 Hz** Stimulation mode can be removed/added via the setup menu.	
	Continuous	1 Hz	Default can be switched between **1 Hz** and **0.1 Hz** Stimulation mode can be removed/added via the setup menu.	
DBS - Double Burst Stimulation		Ratio 3:2	Default can be switched between ratio of **3:2** and **3:3** Stimulation mode can be removed/added via the setup menu.	
TET - Tetanic			Default can be switched between **50 Hz** and **100 Hz** Stimulation mode can be removed/added via the setup menu.	

Stimulation sites			
Abductor pollicis / nervus ulnaris	✓	✓	
Flexor hallucis brevis muscle / posterior tibial nerve		✓	
Obiculari oculi muscle / Facial nerve		✓	

Stimulation features & options			
Stimulation strength unit	mA	Default can be switched between **mA** or **µC**	
Stimulation pulse width	200 µs	In any stimulation mode the pulse width can be switched between **200 µs** or **300 µs**	
Stimulation output	Rotary control knob	Adjustable via keypad. Default output can also be set (0 - 60 mA, 0 - 12/18 µC)	
Numerical display of stimulation output		✓	
Stimulation visual indicator	✓	✓	
Stimulation beep	✓	Can be switched on/off	
Timer display		✓	

Calibration modes			
Automatic calibration function for alignment with patients' individual response		✓	
Impedance monitoring for optimal stimulation		✓	
Calibration of device and creation of baseline reference		✓	✓
Calibration (1) at set stimulation strength		✓	✓
Calibration (2) determination of supramaximal stimulation strength			✓
Adjustable baseline		✓	✓

Graphs & trends			
Single Twitch Trending Graph			✓
TOF Trending Graph			✓
TOF Twitch Result graph			✓
PTC result graph			✓
Single Twitch stimulation graph		✓	
TOF stimulation graph		✓	
DBS stimulation graph		✓	
TET stimulation graph		✓	

Display features			
Large LCD display		✓ 4.4" (11.18 cm)	
Adjustable TOF monitor alerts (lower & upper)			✓
Alerts and faults display		✓	
Skin Temperature monitoring		Sensor attaches to the hand adapter.	

Patient stimulation data		
Onboard data storage		✓
Data storage download to external devices		✓ (Unreleased)
Remote connection to patient monitor		✓ (Unreleased)

Accessories			
Stimulation leads	Included	Included	
Patient cable assembly		Included	
AMG (Acceleromyography) sensor			Included
Temperature sensor		Optional accessory	
AMG Thumb adapter			Optional accessory
AMG Hand adapter		Optional accessory, for connection of skin temperature sensor.	Optional accessory, for connection of AMG sensor and/or skin temperature sensor.
AMG Eye adapter			Optional accessory
Pole mount / standard rail mount		Optional accessory	
USB cable		Optional accessory	

Stimulation Electrodes	Uses standard low-cost ECG electrodes	Uses standard low-cost ECG electrodes (Paediatric)

Designed to comply with the latest European medical standards		✓

Hz = Stimulation pulses per seconds (Hertz).

mA = Stimulation strength in milliamperes.

µC = Stimulation strength in microcoulombs.

µs = Stimulation pulse width in microseconds.

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