



DEWE3-M8s/M12s

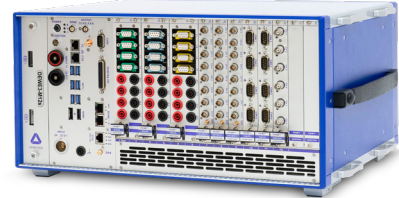


Key facts

- ▶ Designed for automotive applications
- ▶ Compact and flexible configuration
- ▶ Powerful computer integrated for online data processing
- ▶ Battery support for stand-alone operation



DEWE3-M8s



DEWE3-M12s

System specifications

	DEWE3-M8s	DEWE3-M12s	
General			
Input channels	Up to 64 high-speed channels (100 S/s to 5 MS/s)	Up to 96 high-speed channels (100 S/s to 5 MS/s)	
Input specification	Supports all TRION/TRION3 (high-speed) series interface modules. Optimized to operate with high-speed TRION3 series modules.		
Open slots for TRION(3) modules	8	12	
High-speed channel expansion	Combine multiple DEWE3-M8s via OXYGEN-NET	Combine multiple DEWE3-M12s via OXYGEN-NET	
Low-speed channel expansion (100 Hz)	XR modules		
Data storage	3 removable drive bays equipped with <ul style="list-style-type: none">– 1 TB SSD-PCIe (2 TB optional)– 512 GB SSD for operating system (1 TB optional)		
Gapless storing rate	800 MB/s		
Power supply			
Input	<ul style="list-style-type: none">– Isolated power supply with wide range input from 11..32 V_{DC} (max. 10..36 V_{DC})– USP function with battery charger and 2 integrated battery bays (batteries optional)– 2 separate power inputs that can be used mutually as a backup power supply– External AC power supply included		
Batteries (optional)	2x Lithium-ion 28.8 V/81 Wh		
System			
Computer	Intel Core i7, 16 GB RAM ¹⁾		
Connectivity	1x interface for external monitor, 1x DisplayPort, 1x Gbit Ethernet, 1x 2.5 Gbit Ethernet, 6x USB 3.2, 1x Wi-Fi Antenna, 1x EPAD, 1x TRION-SYNC, 1x digital IN/OUT		
Operating system	Windows 11, Linux is optional		
MTBF ²⁾	without fans	35,883 h	27,785 h
	with fans (5-year maintenance)	28,178 h	21,683 h
Dimensions (w x d x h)	339 x 281 x 239 mm (13.3 x 11.1 x 9.4 in)	461 x 281 x 239 mm (18.1 x 11.1 x 9.4 in)	
Weight w/o TRION modules	Typ. 9.1 kg (20.06 lbs)	Typ. 12 kg	

Tab. 1: System specifications DEWE3-M8s/M12s

		DEWE3-M8s	DEWE3-M12s
Environmental specifications			
Operating temperature		0 °C to +50 °C, down to -20 °C with pre-warmed unit	
Storage temperature		-20 °C to +70 °C	
Humidity		10 % to 80 %, non condensing; 5 % to 95 % rel. humidity	
Shock and vibration tests			
Sine vibration test EN 60068-2-6:2008	Shape	Sine	
	Frequency range	10–150 Hz	
	Acceleration	2g	
	Sweep rate	1 oct/min	
	Duration test in 3 directions	20 cycles	
Random vibration test EN IEC 60721-3-2:2018; Class 2M4	Spectral acceleration density	1.0 (m/s²)²/Hz @ 10..20 Hz frequency range 0.5 (m/s²)²/Hz @ 500..2000 Hz frequency range	
	Duration	30 minutes/direction	
Shocktests Shock EN 60068-2-27:2009	Pulse form	Half-sine	
	Acceleration amplitude	15g	
	Duration	11 ms	
	Direction	3 bumps each direction, 6 directions in total	

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¹⁾ RAM upgrade option RAM-16G-32G recommended for

- Systems with 4 or more TRION3-1810M-POWER modules – each channel sampling at 10 MS/s
- Systems with 10 or more TRION3-1820-MULTI-8-LOB modules – each channel sampling with 2 MS/s
- 450 MB/s or more data transfer rate

²⁾ Meantime between failure

Options and accessoires

Chassis controller options	
DEWE3-OPT-CAN	Optional CAN port on front plate
DEWE3-OPT-IRIG/PTP	Optional IRIG/PTP sync available on front plate
DEWE3-OPT-GPS	Optional GPS sync available on front plate including a GPS antenna

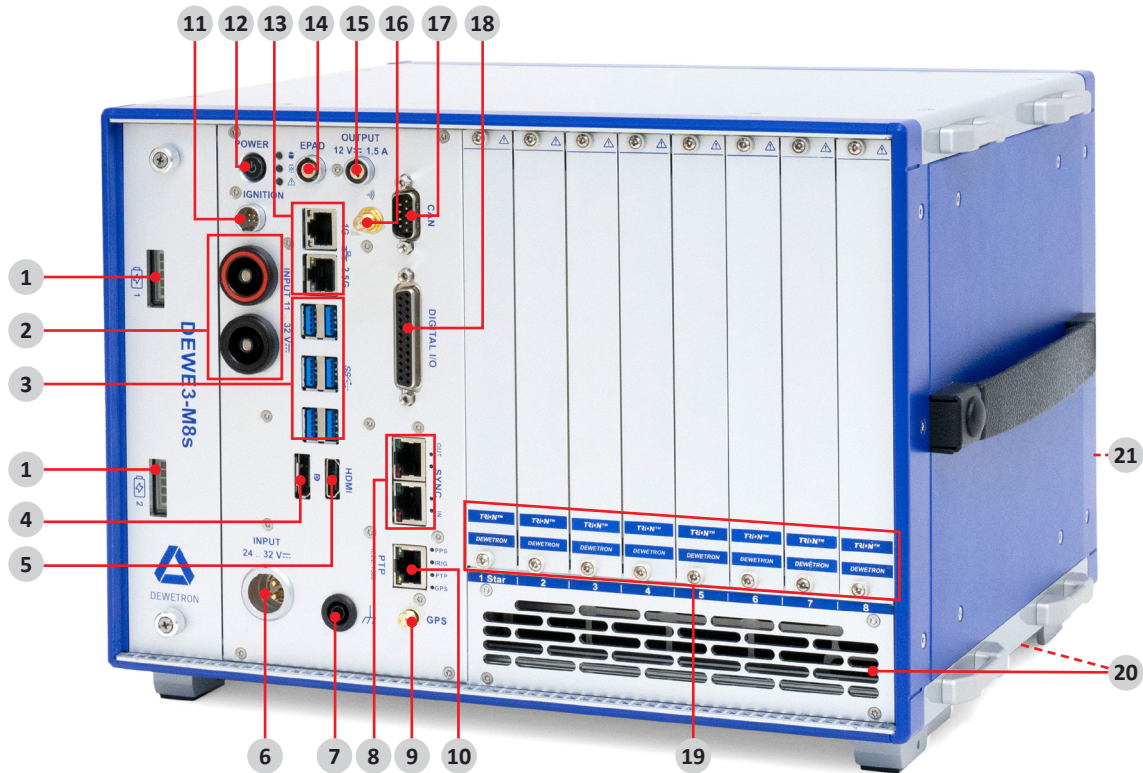
Upgrades	
OPT-LINUX	Linux Ubuntu option for DEWE3 systems
OPT-SECURE-BOOT	Windows secure boot option (DoD-ready) for a new DEWETRON system

Cables	
POW-CBL-KBT6ARN-OE-2	6 mm safety sockets with 10 mm ² cable, open end, length 2 m, needed if system is used with voltages below 24 V
POW-CBL-1B304F-B-2	Ignition control cable, FGJ.1B.304 to 2 male 4 mm banana plugs, length 2 m

Batteries and chargers	
BAT-28V-CHARGER-1	Desktop battery charger for 1 28.8 V battery, incl. external AC adaptor
BAT-28V-81WH	Lithium-ion battery, 28.8 V, 81 Wh, max. 12 A, weight 520 g

Batteries and chargers	
DW2-CLAMP-DC-POWER-8	External power supply box for up to 8 current transducers; input: $9..36 V_{DC}$; external $115/230 V_{AC}$ power supply included; current transducer connection: 8 Lemo sockets with $\pm 15 V$ and $+9 V$ power supply for current transducers; compatible to DEWE2/3 systems

Connections and ports



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|--|---|
| <ol style="list-style-type: none"> 1. Battery status 2. Power supply input 11..36 V (red +, black ground) 3. USB 3.2 interface connectors 4. DisplayPort connector 5. Interface for external monitor 6. Power supply input connector 24..32 V 7. Chassis terminal (ground connection) 8. Sync I/O interface 9. GPS antenna (optional)³⁾ 10. PTP/IEEE 1588 (optional)³⁾ 11. Ignition connector | <ol style="list-style-type: none"> 12. Power on/off button 13. Ethernet connector 14. EPAD interface connector 15. Power supply output for accessories (LEMO EGG.1B.302) 16. Wi-fi antenna 17. CAN interface (D-SUB-9) (optional)³⁾ 18. Digital I/O interface (D-SUB-25) 19. 8 or 12 TRION(3) series module slots⁴⁾ 20. Inlet air (on front and bottom) 21. Exhaust air (on backside) |
|--|---|

3) The interfaces are available on every device, but are only functional if the corresponding option has been purchased.

4) DEWE3-M8s: 8 slots; DEWE3-M12s: 12 slots