

R8 / R8B / R8D / R8DB

THE MOST COMPACT HIGH CHANNEL PORTABLE

- 4 versions available:
 - R8 - with integrated SBOXre computer
 - R8B - with hot-swappable 384 Wh batteries
 - R8D - with 17" high brightness multi-touch screen
 - R8DB - with touch screen and hot-swappable batteries
- Up to 128 analogue channels with SIRIUS HD (200 kS/s each channel)
- Up to 64 analogue channels with SIRIUS HS (1 MS/s each channel)
- Up to 64 Supercounters®
- Up to 8 CAN ports
- Up to 64 analogue outputs
- 250 GB internal flash + 250 GB removable SSD (1 TB opt.)
- Easily expandable to hundreds of channels



R8

R8B

R8D

R8DB

	R8	R8B	R8D	R8DB
TECHNICAL SPECIFICATIONS				
Display	-	-	17" high brightness multi-touch display full HD	17" high brightness multi-touch display full HD
Hot-swappable batteries	-	384 Wh Li-Ion	-	384 Wh Li-Ion
CPU	Intel® Core™ i7-3612QE; 4x 2.1 GHz; 8 threads			
RAM	4 GB			
Storage	250 GB removable SATA SSD Option: 1TB removable SATA SSD Option: 250 GB mSATA internal SSD			
Power supply voltage	12-36 VDC	18-24 VDC	12-36 VDC	18-24 VDC
Power consumption (without SIRIUS slices)	Typ. 25 W (max. 55 W)	Typ. 25 W (max. 55 W)	Typ. 35 W (max. 65 W)	Typ. 35 W (max. 65 W)
Charging power	-	60 W	-	60 W
Operating temperature	-10 to 50°C	0 to 40°C	-10 to 50°C	0 to 40°C
Storage temperature	-40 to 85°C	-20 to 60°C	-40 to 85°C	-20 to 60°C
INTERFACES AND OPTIONS				
USB	Front: 4x USB 3.0	Front: 4x USB 3.0	Front: 3x USB 3.0, 1x USB 2.0 Rear: 4x USB 3.0	Front: 3x USB 3.0, 1x USB 2.0 Rear: 4x USB 3.0
Ethernet	1x GLAN, 1x WLAN, opt. 2x GLAN instead of WLAN			
EtherCAT®	1x EtherCAT® 100Mbps Full Duplex, LEMO 8 pin female, max. 8 A (shared with power out connector)			
Power out	Switched supply on L1B2f, max. 8 A (shared with EtherCAT® connector)			
Video	1x DVI-I (VGA and HDMI compatible)			
GPS option	10 Hz or 100 Hz or 100 Hz + RTK			
GPS display	External on DSUB9f connector with remote power on			
Synchronization	2x SIRIUS® SYNC on L00B4f			
Analogue out option	up to 64 channels	-	-	-
PHYSICAL SPECIFICATIONS				
Dimensions	447 x 313 x 150 mm	447 x 313 x 205 mm	447 x 313 x 165 mm	447 x 313 x 205 mm
Weight excl. SIRIUS® slices	5 kg	9.6 kg incl. 4 batteries	7.3 kg	11.9 kg incl. 4 batteries
Humidity (@60°C)	5 to 95 % RH non-condensing			
Shock & Vibration	VIBRATION SWEEP SINUS (EN 60068-2-6:2008) VIBRATION RANDOM (EN 60721-3-2: 1997 - Class 2M2) SHOCK (EN 60068-2-27:2009) MIL-STD-810D			

Battery weight: 650 g SIRIUS® slice weight: ~800 g

SIRIUS AMPLIFIERS

Isolated / differential

- ▶ SIRIUSir 8xACC
- ▶ SIRIUSir 6xACC, 2xACC+
- ▶ SIRIUSir 8xCHG
- ▶ SIRIUSir 8xHV
- ▶ SIRIUSir 8xMULTI
- ▶ SIRIUSir 8xSTG
- ▶ SIRIUSir 8xSTGM
- ▶ SIRIUSr-HD 16xSTGS
- ▶ SIRIUSr-HD 16xLV
- ▶ SIRIUSir-HS 8xACC
- ▶ SIRIUSir-HS 6xACC, 2xACC+
- ▶ ...

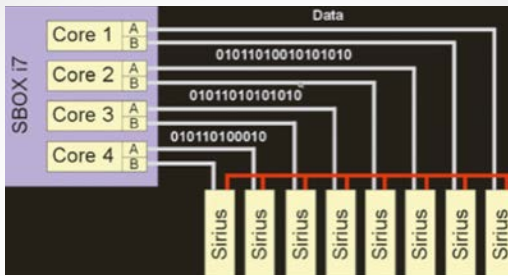


R8



- ▶ Base enclosure for rack/standalone solution
- ▶ Including powerful Core i7 SBOXre computer
- ▶ Provides space for up to 8 SIRIUSr slices

Intel i7-PC



The fast SBOX computer is equipped with a quad core/8 thread i7 CPU. One native USB port for each of the 8 slots guarantees the fastest data throughput:

- ▶ 64 channels @ 1 MS/s, 16 bit – high speed
- ▶ 64 channels @ 200 kS/s, 2x24 bit – DUALCOREADC®
- ▶ 128 channels @ 200 kS/s, 24 bit – high density
- ▶ i7 CPU
- ▶ 1 TB SSD: up to 180 MB/s data streaming

CONFIGURATION EXAMPLE



- 8x 1 MS/s
- 8x 200 kS/s
- 8x 200 kS/s
- 16x 200 kS/s
- 16x 200 kS/s
- 16x 200 kS/s
- 8x 1 MS/s
- 8x 1 MS/s

Mixed analogue channels:

- ▶ 24 channels @ 1 MS/s, 16 bit – high speed
- ▶ 16 channels @ 200 kS/s, 2x24 bit – DUALCOREADC®
- ▶ 48 channels @ 200 kS/s, 24 bit – high density
- ▶ 8 counters
- ▶ 5 CAN BUS

HIGH CHANNEL COUNT EXAMPLE

Cascading systems with DEWESoft-NET

Example configuration:
320 analogue channels and 320 counters

