

Display DDU 8

The display DDU 8 integrates a programmable full color dash board display with a data logging system for motorsports applications. This allows for synchronized acquisition and visualization of engine data from the ECU and chassis data from up to 24 analog and 4 digital input channels. Additional input devices can be connected via the Ethernet and CAN buses. Recorded data from the internal 2 GB flash memory can be downloaded via high-speed Ethernet or via wireless connection with the BT 60 burst telemetry system.

As a base system the DDU 8 is sold as display only. Software upgrades for the DDU 8 (field upgradable by entering a key) activate data logger functionality, additional recording on USB Flash drive, CCP-Master and additional input channels.



Application
800 x 480 pixel high resolution 5" full graphics color display
Multiple user configurable display pages
Multicolor (RGB) gearshift lights
8 kHz AD converters with digital low pass filter
Configurable math channels
User configurable CAN in/out messages
Up to 1,000 Hz acquisition rate for all channels
Online data compression
Up to 200 kB/s data acquisition rate
Up to 720 recording channels
1,000 kB/s upload rate
3-port network switch
Additional recording on USB Flash drive
CCP-Master, data acquisition from ECU that support CAN calibration protocol

Mechanical Data	
Size	161 x 111 x 31 (49) mm
Weight	675 g
Dust and splash water proof aluminium housing	
Operating temperature (internal)	-20 ... +60 °C
Max. vibration	Vibration profile 1 (see Appendix or www.bosch-motorsport.com)

Connectors	
Autosport connectors double density	2 x 41 pin
Mating connector (Red)	
AS DD 6-12-41SN	F 02U 002 216-01
Mating connector (Yellow)	
AS DD 6-12-41SA	F 02U 004 180-01

Software
Configuration via RaceCon over Ethernet or MSA-Box II

Accessories

External switch for page selection (12 step switch)
B 261 209 658

External switch for brightness adjustment or page selection (6 step switch)
B 261 209 659

USB Flash drive 2 GB, preformatted with Bosch File System (BFS)
F 02U V00 867-01

Ruggedized USB Flash drive and connector are available on request.

Application Hints

Internal battery for data preservation included.

Required service interval 12 months (internal battery is replaced).

Part Number

Display DDU 8 **F 02U V00 320-03**

Software Upgrade 1
Data logger functionality **F 02U V00 701-01**

Software Upgrade 2
20 analog channels and second connector unlocked **F 02U V00 702-01**

Software Upgrade 3
CCP-Master (ASAP2 file from ECU manufacturer required) **F 02U V00 796-01**

Software Upgrade 4 (requires Upgrade 1)
USB-Port unlocked (USB Flash drive 2 GB Bosch File System (BFS) format included, works with Bosch File System (BFS) preformatted USB Flash drive only) **F 02U V00 871-01**

DDU 8 Feature List

	DDU 8 Base Display	Software Upgrade 1	Software Upgrade 2
Application			
Storage capacity		2 GB	
BT 60 burst telemetry support		+	
FM 40 long range telemetry support		+	
GPS input			+
Electrical Data			
Supply voltage	8 ... 18 V		
Max. power consumption (w/o loads)	14 W at 14 V		
Inputs			
Page/brightness selection	2		
Analog channels	4		20
Input range	0 ... 5 V		
Resolution	12 bit		
Switchable pull up resistor	3 kΩ		
Rotational channels (Input Hall/Inductive)			4
Outputs			
PWM outputs (Low side switch 2 A each)	4		
Sensor supply 5 V (350 mA each)	1		3
Sensor supply 10 V (350 mA each)			1
Sensor supply 12 V (1 A non regulated)			1
Communication interfaces			
CAN interfaces	2		
Ethernet 100BaseT	3		
RS232		Telemetry	GPS
Lap trigger input	1		