

D series



Technical Specifications	D1000/D1010	D1300/D1310	D1320	D1520	D2310	D2510
Display technology	Colour-TFT	Colour-TFT	Colour-TFT	Colour-TFT	Colour-TFT	Colour-TFT
Colours	262144	262144	262144	262144	262144	262144
Display dimension [cm/inch]	8.9 / 3.5"	14.5 / 5.7"	14.5 / 5.7"	17.8 / 7"	14.5 / 5.7"	17.8 / 7"
Display resolution [Pixel]	320 x 240	640 x 480	640 x 480	800 x 480	640 x 480	800 x 480
Aspect ratio	4 : 3	4 : 3	4 : 3	16 : 9	4 : 3	16 : 9
Brightness [cd/m ²] <i>dimmbable</i>	350... 400	350... 400	350	350	350... 400	350... 400
Touchscreen	opt.	opt.	yes	yes	opt.	opt.
Rotary encoder	--	--	--	--	1	1
Keys	4 touchpads/ 4 short-stroke keys	5 touchpads/ 5 short-stroke keys	--	--	8 short-stroke keys	15 short-stroke keys
Key illumination	LED blue	LED blue	--	--	LED white	LED white
Status LEDs	--	--	--	--	--	--
Switching elements	--	--	--	--	--	--
Housing dimensions [WxHxD mm]	96 x 96 x 63	144 x 144 x 76	144 x 120 x 76	192 x 132 x 76	204 x 140 x 48	246 x 154 x 48
Weight [g]	330	400	400	800	800	1.300
CPU	ARM9 32 Bit	ARM9 32 Bit	ARM9 32 Bit	ARM9 32 Bit	Cortex A9+M4	Cortex A9+M4
Flash / RAM / FRAM [MB]	32 / 64 / 8	32 / 64 / 8	32 / 64 / 8	32 / 64 / 8	64 / 256 / 8	64 / 256 / 8
Int. Mass storage [1 GB]	opt.	opt.	opt.	opt.	--	--
RTC	yes	yes	yes	yes	yes	yes
Voltage measurement	yes	yes	yes	yes	yes	yes
Device temp. measurement	yes	yes	yes	yes	yes	yes
Digital inputs	4	4	4	4	4	4
Digital outputs	2 PWM	2 PWM	2 PWM	2 PWM	2 PWM	2 PWM
Analog inputs [V / mA]	4, switchable 0...10 / 0... 20	4, switchable 0...10 / 0... 20	4, switchable 0...10 / 0... 20	4, switchable 0...10 / 0... 20	4, switchable 0...10 / 0... 20	4, switchable 0...10 / 0... 20
Analog outputs	--	--	--	--	--	--
Video inputs	--	--	--	--	4	4
Video images parallel	--	--	--	--	2	2
CAN ISO11898	2	2	2	2	4, thereof 1 x galvan. isolated	4, thereof 1 x galvan. isolated
Ethernet [MBit/s]	10/100	10/100	10/100	10/100	10/100	10/100
USB	Host	Host	Host	Host	Host	Host
RS232	yes	yes	yes	yes	yes	yes
RS485	opt.	opt.	opt.	opt.	--	--
Operating system	GSe-OS®	GSe-OS®	GSe-OS®	GSe-OS®	GSe-OS®	GSe-OS®
Develop.environ. [ANSI-C]	GSe-VISU®	GSe-VISU®	GSe-VISU®	GSe-VISU®	GSe-VISU®	GSe-VISU®
Integrated control	yes	yes	yes	yes	yes	yes
CODESYS Runtime	opt.	opt.	opt.	opt.	on demand	on demand
J1939	yes	yes	yes	yes	yes	yes
Modbus	TCP (RTU opt.)	TCP (RTU opt.)	TCP (RTU opt.)	TCP (RTU opt.)	TCP	TCP
CANopen Slave	yes	yes	yes	yes	yes	yes
Data logger (via USB)	yes	yes	yes	yes	yes	yes
Mounting	Front panel instal- lation via clamping bracket	Front panel instal- lation via clamping bracket	Front panel instal- lation via clamping bracket	Front panel instal- lation via clamping bracket	Front panel instal- lation via clamping bracket	Front panel instal- lation via clamping bracket
Protection (Front / Back)	IP65 / IP20	IP65 / IP20	IP65 / IP20	IP65 / IP20	IP65 / IP20	IP65 / IP20
Supply voltage [VDC]	10... 32	10... 32	10... 32	10... 32	10... 32	10... 32
Operating temperature [C°]	-20... +70	-20... +70	-20... +70	-20... +70	-20... +70	-20... +70
Storage temperature [C°]	-30... +80	-30... +80	-30... +80	-30... +80	-30... +80	-30... +80
Certifications	E1, GL	E1, GL	E1, GL	E1, GL	E1 in preparation	E1 in preparation
CE sign	2014/30/EU	2014/30/EU	2014/30/EU	2014/30/EU	2014/30/EU	2014/30/EU