

FlatClient MAR



Robust Panel PC for Marine Applications

- ▶ EN 60945 and DNVGL compliant (control room, accommodation, bridge)
- ▶ Scalable performance from Intel Atom® to Intel® Core™ i5
- ▶ Salt spray tested according to EN 60068-2-52

TECHNICAL INFORMATION

	ECO Line	PRO Line
DISPLAY SIZE	See table below landscape or portrait mode	See table below landscape or portrait mode
LED BACKLIGHT	Life time >=50.000 h	Life time >=50.000 h
BRIGHTNESS	See table below	See table below
VIEWING ANGLE	See table below	See table below
DIMENSIONS	See table below (excluding connector & mounting bracket)	See table below (excluding connector & mounting bracket)
WEIGHT	See table below	See table below
FRONT OPTIONS	Projected capacitive touch (PCAP) / protection glass	Projected capacitive touch (PCAP) / safety glass
MOUNTING	Panel mount	Panel mount
PROCESSOR	Intel® Pentium® Quad Core™ N4200	Intel® Core™ i5-7300U Intel® Celeron® 3965U
RAM	4 GByte DDR4 SO-DIMM, 8 GByte DDR4 SO-DIMM	4 GByte DDR4 SO-DIMM, 8 GByte DDR4 SO-DIMM 16 GByte DDR4 SO-DIMM
STANDARD INTERFACES	Intel® Pentium® Quad Core™ N4200: 2x GbE, 1x HDMI, 1x DP, 4x USB 3.0	Intel® Core™ i5-7300U / Intel® Celeron® 3965U: 2x GbE, 1x HDMI, 1x DP, 4x USB 3.0
WIRELESS INTERFACES**	RFID	RFID
OPERATING VOLTAGE ACC. TO EN61131-2	24 VDC (-25 %/+30 %)	24 VDC (-25 %/+30 %)
EMC	EN55032 class B	EN55032 class B
CERTIFICATIONS	CE, UL, DNVGL*	CE, UL, DNVGL*
ALTITUDE	Up to 3.000 m (10.000 ft)	Up to 3.000 m (10.000 ft)
SHOCK ACC. TO EN 60068-2-27	15 G 11 ms duration (half sine)	15 G 11 ms duration (half sine)
VIBRATION ACC. TO EN 60068-2-6	10-500 Hz: 1G/3 axis	10-500 Hz: 1G/3 axis
CORROSION	Salt spray according to EN 60068-2-52	Salt spray according to EN 60068-2-52
OPERATING TEMPERATURE	0 °C to +50 °C	0 °C to +50 °C
STORAGE TEMPERATURE	-20 °C to 70 °C	-20 °C to 70 °C
PROTECTION CLASS	IP65 front, IP20 rear	IP65 front, IP20 rear
HUMIDITY	10 %-90 % @ 39 °C, non condensing	10 %-90 % @ 39 °C, non condensing
MTBF	> 50.000 h	> 50.000 h
VERIFIED OS	Intel® Pentium® Quad Core™ N4200: Windows 10 IoT, Linux	Intel® Core™ i5-7300U / Intel® Celeron® 3965U: Windows 10 IoT, Linux
RoHS COMPLIANT	yes	yes
COOLING	passive cooling, fanless	passive cooling, fanless
OPTIONS (FURTHER OPTIONS ON REQUEST)	- 2 ... 8 GByte RAM - 32 ... 512 GByte SSD - 2x COM (RS232, RS422, RS485) - RFID - CAN	- 2 ... 32 GByte RAM - 32 ... 512 GByte SSD - 2x COM (RS232, RS422, RS485) - RFID - CAN

*) Location classes: Temperature B, Humidity B, Vibration A, EMC B, Enclosure A

**) on request, not available for 10.1" and 12.1"

DISPLAY INFORMATION

DISPLAY SIZE	RESOLUTION	FORMAT	BRIGHTNESS	DIMENSIONS	VIEWING ANGLE	COLORS	WEIGHT
10.1"	1280x800	16:10 WF	500cd	276 x 195 x 65	H170° / V170°	16.2 million	~ 3,7 kg
12.1"	1280x800 WXGA	16:10 WF	500cd	321 x 234 x 65	H178° / V178°	16.7 million	~ 4,7 kg
15.6"	1920x1080, Full HD	16:9 WF	450cd	432 x 281 x 74	H140° / V120°	16.2 million	~ 6,7 kg
18.5"	1920x1080, Full HD	16:9 WF	350cd	500 x 321 x 74	H178° / V178°	16.7 million	~ 8,6 kg
21.5"	1920x1080, Full HD	16:9 WF	300cd	575 x 367 x 74	H178° / V178°	16.7 million	~ 10,7 kg