N-Drive

Naviop offers a wide range of products that can be used stand-alone, to make limited checks or show small size boats' datas, or can be included within wider configurations for complete control and monitoring systems.

Please contact our official dealer for your Country to choose the most suitable configuration for your project.

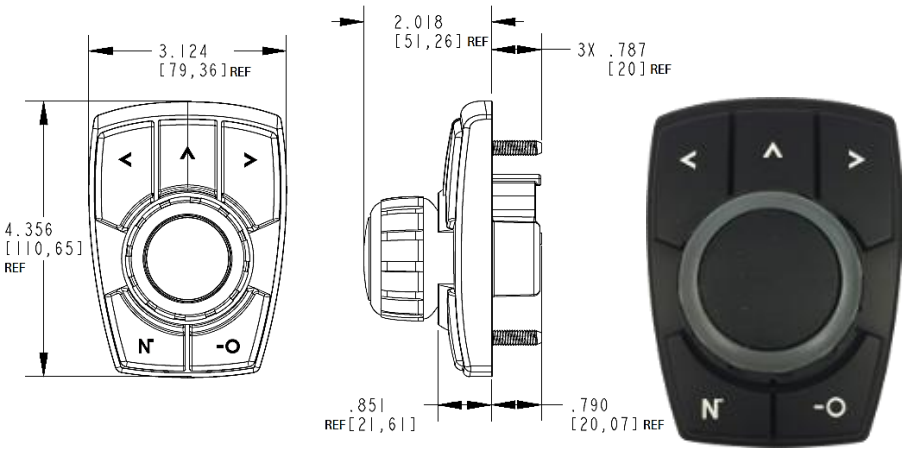
Naviop N-Pilot

The new display controller

Encoder Joystick with pushbuttons
J1939 communication protocol
Dimmable led indicator and legends
Sealed to IP67
Vibration and impact resistant
Operating temperature: -40°C a +85°C
Long Life: 500,000 cycles
Designed for 12/24 volt power supply systems
Support for multiple keys combination

Display functions at your fingertips

- 5 hot keys for a rapid navigation
- Scroll with rotary encoder
- Select with pushbutton
- Navigate with joystick



Naviop N-Drive

ENVIRONMENTAL SPECIFICATIONS		
Operating temperature	ANSI/ASAE EP455 5.1.1 Level 2	-40°C for 4 hours to +85°C for 11 hours
Storage Temperature	ANSI/ASAE EP455 5.1.2 Level 2	-40°C for 4 hours to +85°C for 4 hours
Thermal Shock	ANSI/ASAE EP455 5.1.3	-40°C at 70°C at a rate of 4°C/min (1 hour at extremis)
Altitude (Barometric Pressure)	ANSI/ASAE EP455 5.2	101.3kPa at 18.6kPa
Sand and Dust	ANSI/ASAE EP455 5.3	24 hours with 0.88g/m3
Solar Radiation	ANSI/ASAE EP455 5.4	43 to 75W/m2 UV Radiation (280 to 400nm wavelength) for 300h
Wash Down	ANSI/ASAE EP455 5.6 Level 2	375 kPa and 8.3 L/min for 10 minutes @15°C Water temp
Ingress Protection	IP67	1 meter submersion for 30 minutes
Humidity	ANSI/ASAE EP455 5.13	96% Humidity at 35°C for 240 hours.
Salt Fog	ANSI/ASAE EP455 5.9	5% aqueous solution of NaCl at 35°C and a pH between 6.5 and 7.2 for 48 hours
Chemical resistance (Resistance to Solvents)	ISO 16750-5 EP 455 (5.8.2)	
Thermal Cicling (Change of Temperature)	ISO 16750-4	-40° to 85°C for 2 hours at extremes change rate = 1°C/min (8 hours) repeat for 30 cycles.
ELECTROMAGNETIC COMPATIBILITY SPECIFICATIONS		
ESD	ANSI/ASAE EP455 5.12	+/- 25kV for 10 pulses, 5 of each polarity
Radiated Immunity	ISO14982 6.6	10MHz-1000MHz Range 48mA Bulk Current Injections 100V/m
Conducted Emissions	SAE J1113-41	Class 3
Broadband Radiated Emissions	ISO14982 6.4	64dB to 54dB, 30MHz-75MHz (linearly decreases) 54dB to 65dB, 75MHz-400MHz (linearly increases) 65dB, 400MHz-1000MHz
MECHANICAL PERFORMANCE		
Vibration, Random	ANSI/ASAE EP455 5.15.1	2 hours each axis 52.4 m/s2 RMS overall acceleration and spectral power density of 2m2/s3 from 50Hz to 2000Hz
Vibration , Sinusoidal	ANSI/ASAE EP455 5.15.2	A logarithmic sweep from 10Hz to 2000Hz to 10Hz over a period of 20 minutes for 4 hours in each of 3 orthogonal axes with amplitude of 1.5mm from 10Hz to 40Hz and a constant acceleration of 35m/s2 RMS from 40Hz to 2000Hz
Shock / Crash Safety	ANSI/ASAE EP455 5.14	A single 11ms half sine pulse of 490 m/s2 in 3 perpendicular axes.
Drop	ANSI/ASAE EP455 5.14.2 Level 1	Drop component 400mm into a hardwood benchtop on all pratical edges
ELECTRICAL PERFORMANCE SPECIFICATIONS		
Maximum load	ANSI/ASAE EP455 5.1.1 Level 2	-40°C for 4 hours to +85°C for 11 hours max load applied
Jump start forward voltage	ISO 16750-2	36V for 60 minutes
Jump start reverse voltage	ISO 16750-2	-36V for 60 minutes
Short circuit protection	ISO 16750-2	All outputs to ground for 60s
Reverse polarity protection	ISO 16750-2	28V for 60s
Starting profile	ISO 16750-2	Class A
Battery-less operation	ANSI/ASAE EP455 5.11.3 Level 2	Apply 6+12.6sin(2*pi*f*t) f is swept from 500Hz to 1.5kHz 5min
Load dump	ISO 7637-2 Test Pulse 5b	Class A
Switching spikes – negative	ISO 7637-2 Test Pulse 3a	Class A
Switching spikes – positive	ISO 7637-2 Test Pulse 3b	Class A
Wire harness inductance	ISO 7637-2 Test Pulse 2a and 2b	Class A
+/- inductive load pulse	ANSI/ASAE EP455 5.11.4	14-300e^(-t/.001)V 1Hz for 300 cycles
+/- mutual coupling	ANSI/ASAE EP455 5.11.6 Level 2	14+200e^(-t/14x10^-6)V 1Hz for 300 cycles
Alternator field decay	ANSI/ASAE EP455 5.11.2	Class A