

POCKET-SIZED NMEA 0183 TESTER & OSCILLOSCOPE

The X300 Compact NMEA Tester is a sub-compact and ultra-light portable NMEA 0183 reader, complete with built in oscilloscope function.

With the ability to monitor NMEA 0183 data, diagnose signal issues and predict failures due to signal quality the X300 is the world's first complete NMEA 0183 maintenance tool.

In addition, the NMEA output feature is useful for testing suspect equipment that requires a NMEA 0183 data input.

Once data has been monitored it can be stored on the supplied SD card and the data and waveform may then be analysed on a standard PC or laptop.

Being compact the X300 runs on a rechargeable battery which can be charged either via a computer's USB port or an appropriate AC/DC USB charging port.

The X-300 is a tool that every engineer needs in their pocket!

Features

- Easy to carry, sub-compact & ultra-light
- Use of rechargeable battery
- Monitoring, checking and analysis function of NMEA 0183(IEC61162-1/2) data
- General-purpose Oscilloscope which can diagnose NMEA 0183 signal and electric signal
- Receive NMEA 0183 data without regard to the existing circuits by using High Impedance circuit
- Receive NMEA 0183 data in low voltage which has never been received in standard NMEA listener circuits
- Save NMEA 0183 data & Oscilloscope waveform in Micro-SD, and check the data on a PC
- Generate NMEA 0183 data & Pulse signal useful to test equipment while the vessel is anchoring
- Rechargeable via USB

NMEA Monitoring Page



Oscilloscope Page

SPECIFICATIONS

GENERAL

DISPLAY	Full Colour 2.8" TFT LCD (65k, 320x240)
INPUT IMPEDANCE	500k Ω (NMEA & Oscilloscope)
MAX. INPUT VOLTAGE	80Vpp (NMEA & Oscilloscope)
DATA STORAGE	Micro SD card (Optional)
PC CONNECTION	Via USB as SD card reader
F/W UPGRADE	USB
POWER & BATTERY	500mAH 3.7V Rechargeable Lithium-ion battery, USB
DIMENSION WEIGHT	91 x 62 x 13mm, 100g

OSCILLOSCOPE

ANALOGUE BANDWIDTH	0 ~ 1MHz
MAX SAMPLE RATE	1Msps 12Bits
HORIZONTAL SENSITIVITY	1uS/Div ~ 10S/Div
HORIZONTAL POSITION	Adjustable with indicator
VERTICAL SENSITIVITY	10mV/Div ~ 10V/Div (with x 1 probe)
VERTICAL POSITION	Adjustable with indicator
TRIG MODE	Auto, Normal, Single, Scan and Fit Rising/Falling edge/level trigger Trig level / sensitivity adjustable with indicator
MEASUREMENT	Frequency, Cycle time, Duty cycle, Peak / RMS / Average / DC voltage Precise vertical / horizontal measurement with markers Hold/Run
SIGNAL GENERATOR	10Hz ~ 1MHz square wave

NMEA 0183 MONITOR

SIGNAL VOLTAGE	Min. 1.4V PP
DATA TYPE	1,200~115,200bps, 7~8bit, 1/2, Parity N/E/O
VIEW MODE	<i>Raw</i> - Display the received NMEA 0183 data or ASCII code, scroll down when exceed 14 lines. <i>Static</i> – Display only NMEA 0183 sentences. Update changed data without scroll, and display max. 14 lines at the same time.
CHECK OF DATA	Display the status of Checksum, Length, Data loss and etc. in many different colours
DATA GENERATOR	Generate mainly used NMEA 0183 sentences.

**Not calibrated for critical analysis, but is ready for general purpose use