

N2KMETER

Mini/Diagnostics

■ The N2KMeter enables trained and untrained personnel to diagnose and trouble-shoot network installations quickly and easily. Completely passive on the network, the meter analyzes both data and power lines on the network. In seconds, both network-wide and device-specific traffic as well as power monitoring information is captured and displayed on a simple user interface.



- Diagnostic tool for NMEA 2000® networks
- Evaluates physical layer and device functions on a network
- Evaluation at boat can be locked in and then evaluated later on bench



N2KMeter

Specifications

Electrician Mode (simple)

1. PLUG IN AND SET N2KMETER ROTARY SWITCH TO "AUTOSEARCH"
2. IDENTIFY NETWORK HEALTH
 - HAPPY FACE = HEALTHY

 - NEUTRAL FACE = NOMINAL

 - SAD FACE = FAULTY
3. SCROLL THROUGH FAULTS. REFER TO USER MANUAL TO LINK THESE FAULTS TO MOST LIKELY NETWORK PROBLEMS OR FREEZE AND LOCK SETTINGS FOR REVIEW BACK AT THE SHOP BY AN NMEA 2000® EXPERT



Expert Mode (advanced)

1. SCROLL THROUGH NMEA 2000® PARAMETERS FOR EACH ACTIVE NMEA 2000® NODE (MAC ID)
 - COMMUNICATION ERRORS (RATE, CUMULATIVE #)
 - BANDWIDTH (% OF FULL USAGE)
 - POWER SUPPLY AND SHIELD VOLTAGES
 - DATA BIT QUALITY (DOMINANT, RECESSIVE, +, -, DIFFERENTIAL VOLTAGE, CMV)
2. CHECK VALUES (BOTH NUMERIC AND ICONS)
 - HAPPY FACE = WITHIN SPEC
 - NEUTRAL FACE = VERY CLOSE TO LIMIT
 - SAD FACE = OUT OF LIMIT
3. REFER TO USER MANUAL TO LINK THESE FAULTS TO MOST LIKELY NETWORK PROBLEMS



MECHANICAL

POWER SUPPLY: NETWORK 7 - 30VDC < 90mA
 BATTERIES 2 X AA ALKALINE BATTERIES
 6 HOURS OF OPERATION APPROX. 1 YEAR DATA RETENTION

CONNECTORS: MICRO CONNECTOR

BAND RATES: 125K, 250K AND 500K (AUTO-DETECT)

ANALOG ACCURACY: BUS POWER ± 100mV,
 BUS SIGNAL ± 20mV

ANALOG RANGE: BUS POWER 0 TO 25V WITH OVER/
 UNDER RANGE INDICATION BUS
 SIGNAL -5 TO 10V WITH OVER/UNDER
 RANGE INDICATION

ANALOG SAMPLE RATE: BUS POWER 1 KHZ BUS SIGNAL IDEAL
 SAMPLE PT ± 250nS

SIGNAL ERROR THRESHOLD: NMEA 2000® SPEC FOR
 NETWORK POWER

BUS LOAD MEASUREMENT: DETECTS BUS IDLE IN REAL TIME
BUS MESSAGE RATE MEASUREMENT: DETECTS 100% OF INDIVIDUAL CAN
 FRAMES IN REAL TIME

ERROR RATE MEASUREMENT: DETECTS 100% OF INDIVIDUAL ERROR
 FRAMES IN REAL TIME

APPROVALS

NMEA: NMEA 2000® CERTIFIED

PART NUMBER

N2KMETER-01

DESCRIPTION

DIAGNOSTIC METER W/1M MICRO CORDSET