SAL SPU-100

A Revolution in High Precision Navigation



Technical Specifications SPU-100

Physical Specifications Dimensions: 143 x 82 x 200mm (WxHxD) Weight: 2.5 kg Power requirements: 90-240 VAC 1A Battery Back-up: > 7.5 hours of operation

GNSS

Tracked systems: multifrequency GPS, QZSS, Galileo, GLONASS, BeiDou DGPS/RTK capable via RTCMv3 (NTRIP/UHF) and SBAS Position accuracy: RTK: 0.01m RMS, SBAS: 1m Heading: HDG Accuracy: < 0.02° (10m baseline, Relative RTK) Rate of Turn: ROT Accuracy: < 0.1°/min

IMU (Inertial Measurement Unit) Excellent bias instability (0.8°/hr) Ultra low noise gyro (0.08°/√hr)

UHF Radio Pre-configured to 454.325 MHz Frequency range: 410 – 470 MHz Modulation type / Protocol: GMSK, Trimtalk 450S (configurable) Receiver Sensitivity: < -115dBm

Wi-Fi Access Point: IEEE 802.11 a/b/g/n Number of clients: 7 Security: WPA2 Output power: 18 EIRP [dBm] Receiver Sensitivity: < -82dBm

SAL Navigation AB Hägersten, Sweden +46 8 563 05 100 sales@salnavigation.com www.salnavigation.com Data formats Data output (NMEA/AIS): GGA, VTG, HDT, ROT, GSA, GSV, VDM Data protocol: NMEA-0183 (compatible with Trelleborg SafePilot) Connectivity: Wi-Fi, Ethernet

Physical antenna connections GNSS Antennas x2: TNC female UHF/VHF Antenna: TNC female Wi-Fi Antenna: SMA female 4G antenna (optional feature): SMA female

Physical data connection USB - A: Master USB - C: Slave Ethernet Mains power: 3-pin IEC C14 Inlet

Environmental Specifications Operating Temperature: -20°C to +70°C Storage Temperature: -30°C to +80°C Humidity: 95% (non-condensing) RoHs: Meets the directive for Restriction of Hazardous substances

AIS Receiver Dual frequency: 161.975 & 162.025 MHz Receiver Sensitivity: < -107dBm at 20% packet error rate

