

# ExactAire® NanoULTRA-III Range

Feature	NanoULTRA - III Elite	NanoULTRA - III Pro	NanoULTRA - III Lite
Mobile	2G, 3G, 4G (LTE Cat1)	2G, 3G, 4G (LTE Cat1)	2G, 3G, 4G (LTE Cat 1)
Other communications	Wi-Fi, Ethernet	Ethernet	No other comms
Location	On board GPS, cell mast tracking when no GPS	On board GPS, cell mast tracking when no GPS	No on board GPS, cell mast tracking
Power	9 – 30 VDC (4 pin industrial socket), reverse polarity protection; surge protection >31 VDC 10us max . < 2 W idle, < 7 W Max	9 – 30 VDC (4 pin industrial socket), reverse polarity protection; surge protection >30 VDC 10us max . < 1.2 W idle, < 5 W Max	9 – 30 VDC (4 pin industrial socket), reverse polarity protection, surge protection >33 VDC 10us max. < 5 W
Size/Mounting	110*50*100mm. DIN-rail bracket	83 x 25 x 74.2 mm – DIN rail bracket	83 x 25 x 74.2 mm – DIN rail bracket
Antenna	2 x SMA for LTE, 2 x RP-SMA for Wi-Fi, 1 x SMA for GNSS	1 x SMA for LTE for GNSS	1 x SMA for LTE
Environmental	-40 °C to 75 °C, 10% to 90% non-condensing (operational)	-40 °C to 75 °C, 10% to 90% non-condensing (operational)	-40 °C to 75 °C, 10% to 90% non-condensing (operational)
On board memory (for when communications are interrupted)	200 modbus registers, sampled at a 20 second sample rate can be stored for 24 hours before being over written	200 modbus registers, sampled at a 20 second sample rate can be stored for 24 hours before being over written	200 modbus registers, sampled at a 20 second sample rate can be stored for 24 hours before being over written
FOTA (Firmware upgrade over the air)	Resilient and scalable FOTA	Resilient and scalable FOTA	Resilient and scalable FOTA
Serial	RS232/485/Modbus TCP	RS232/485/Modbus	RS485
I/O's	3 x digital i/p's, 2 x digital o/p's (1*relay, 1 open collector), 1 analogue input (0-24V). USB2.0	3 x Configurable Inputs/Outputs. Digital input 0 - 6 V detected as logic low, 8 - 30 V detected as logic high. Open collector output, max output 30 V, 300 mA	2 x Configurable Inputs/Outputs. Digital input 0 - 6 V detected as logic low, 8 - 30 V detected as logic high. Open collector output, max output 30 V, 300 mA
On-board Ethernet	4 x RJ45 ports (1xWAN, 3xLAN), 10/100 Mbps	16 port terminal (1xLAN) 10/100 Mbps	No
Status LEDs	1 x bi-colour connection status LED, 5 x connection strength LEDs, 4 x LAN status LEDs, 1 x Power LED	1 x bi-colour connection status LED, 3 x connection strength LEDs, 1 x LAN status LEDs, 1 x Power LED	3 x connection type status LEDs, 3 x connection strength LEDs, 1x Power LED
Sampling frequency	Sampling time down to 20 seconds (tested to 200 registers on 12 slaves). Event driven, burst sampling to 1second available	Sampling time down to 20 seconds (tested to 200 registers on 12 slaves). Event driven, burst sampling to 1second available	Sampling time down to 20 seconds (tested to 200 registers on 4 slaves). Event driven, burst sampling to 1second available
SIM Holder	Dual SIM card slots for application that require redundancy at this level	Dual SIM card slots (Mini SIM) for application that require redundancy at this level	Single SIM
Modbus handling	Resilient, scalable and reliable modbus handling via .. Supports block and singular register reads. Modbus register maps stored and provisioned via ExactAire™.	Resilient, scalable and reliable modbus handling via .. Supports block and singular register reads. Modbus register maps stored and provisioned via ExactAire™.	Resilient, scalable and reliable modbus handling via .. Supports block and singular register reads. Modbus register maps stored and provisioned via ExactAire™.
Gateway diagnostics	Comprehensive diagnostic capabilities. Live interrogation of field-based unit	Comprehensive diagnostic capabilities. Live interrogation of field-based unit	Comprehensive diagnostic capabilities. Live interrogation of field-based unit
Extra functionality	On board ethernet for routing ethernet based devices to ExactAire™	On board ethernet	
Approvals	CE/RED, FCC, IC/ISED, EAC, RCM, PTCRB, RoHS, WEEE, Wi-Fi Alliance CE/RED, FCC, IC, PTCRB, RCM, EAC, CCC, RoHS, WEEE, IP rating, Anatel, GCF, REACH, E-mark, DNV GL, ECE Regulation 118, Morocco ANRT, Thailand NBTC, Ukraine UCRF, SDPPI (POSTEL), WiFi Certified, MODBUS Conformance AT&T, Verizon Vehicle- ECE R10 (E-mark), ECE R118	CE/RED, EAC, RoHS, WEEE	CE/RED, EAC, RoHS, WEEE
SD Card	Yes	No	No
ExactAire™ IoT platform connectivity	Yes	Yes	Yes
Extensive range of signal conditioning/expansion modules	Yes	Yes	Yes