REDNET A16R  
  
The bi-directional Network Audio Interface shall provide 16 input and 16 output analogue channels with additional 2 input and 2 output digital channels of connectivity to the Dante network. Connectivity shall include 16 analogue inputs and outputs via four 25-way female Dsub connectors wired to AES59 standard. Connectivity shall include 2 digital inputs and outputs via 2 AES/EBU inputs via female XLR connector and 2 AES/EBU outputs via male XLR connector. The Interface shall be an 18 channel device in total, switching to a 16 channel device at sample rates of 176.4 kHz and higher, allowing for AES/EBU inputs to replace analogue channels 15 and 16 when selected. The Interface shall be capable of syncing to internal word clock, XLR DARS input, or an external master word clock. External master word clock in and out shall be via BNC connectors. The Interface shall have user-selectable sample rates of 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz (-4% / -0.1% / +0.1% / +4.167%). Inputs/outputs shall have internal 24-bit A/D & D/A converters. Frequency response shall be 20 Hz – 20 kHz +/- 0.1 dB. Dynamic range shall be 118 dB “A” weighted. Internal signals shall be fully balanced throughout. Inputs and outputs shall be programmable for either +18 dBu or +24 dBu signal levels relative to a 0 dBFS digital reference.   
  
The Network Audio Interface shall provide both redundant power and network connections, with the ability to have redundant and switched network modes to run a redundant connection or daisy-chain devices together.  
  
The system shall use JetPLL technology to minimize conversion jitter. LED front panel indicators shall display the status of Power and Network connections, Sync Lock status, Sample Rate, Input/Output range and Clock Source. The Network Audio Interface shall be contained in a 1RU industrial package designed for fixed installation in engineered audio and communications systems. Dimensions shall be 482.6 x 308 x 44.5mm (19”W x 12.13”D x 1.752”H). It shall weigh 4.78 kg (10.54 lbs). Maximum power consumption shall be 41 W.  
  
The Network Audio Interface shall utilize the Dante Protocol for transport of digital audio signals. The system shall be capable of transporting up to 512 bidirectional audio channels over a single, standard Gigabit (or higher) Ethernet link. Software shall be provided for the routing, controlling, and configuring the Network Audio Interface. Software shall provide remote control of reference level, selection of preferred master clock, and sample rate. Ethernet connectivity shall be through a rear panel 8p8c/RJ45 LAN port, which supports EtherCON connections.  
  
Ethernet communications shall be utilized for software control and Interface configuration. Dante technology shall transport digital audio over fast Ethernet, allowing multiple units to share digital audio. The Network Audio Interface shall require connection to an external 100Base-T or 1 Gigabit Ethernet switch. All Dante and Ethernet connections shall be via Cat5e (or better) cable or fiber-optic. Software shall operate on a PC computer, with network card installed, running Windows 7, Windows 8, and Windows 10 or Mac computer, with network card installed, running 10.9.x, 10.10.x, 10.11.x and 10.12.x.  
  
The Network Audio Interface shall be CE marked, UL/C-UL listed, and shall incorporate AES48-2005 Grounding & EMC practices. The Digital Audio Platform shall be compliant with EU Directive 2002/95/EC, the RoHS directive.   
  
Warranty shall be 1 year.   
  
The Network Audio Interface shall be Focusrite RedNet A16R.