



## Benefits

- Operational cost reduction
- Service enablement
- Lower TCO
- Revenue enhancement
- Proven reliability
- Management flexibility
- Future roadmap
- Bandwidth savings
- Toll quality voice over limited band-width
- No S/W Licences

## Ultra Communicate VadEDGE 4208a Product Datasheet

The vadEDGE range of Multi-Service Communications Processors enables effective communication at the edge of the enterprise network. With vadEDGE, mobile, regional and remotely located teams are able to access the same voice and data communication channels that their colleagues benefit from at the organisation's headquarters.



### VadEDGE

#### FEATURES

- 2 software selectable WAN interfaces
- 2 x 10/100 Ethernet ports
- 8 x Analogue FXS, FXO, E&M ports
- VoIP SIP & VoIP Vados Proprietary
- Multi-service support with QoS
- Hardware Based Compression
- Hardware Based Encryption
- High Reliability
- Feature-rich Management platform
- Supports SCPC, TDM/SCPC, TDMA

## Delivering specialist communication solutions

The vadEDGE platform supports a wide range of protocols, WAN and user interfaces. This enables customers to aggregate and effectively deliver multiple service streams over almost any bearer communications medium including Packet Radio, 2.5G/3G, PSTN, ISDN, Leased Line and Satellite (VSAT). Combining voice with packet data services such as fax, IP, POS, ATM, vadEDGE efficiently and cost effectively manages bandwidth through dynamic packet fragmentation and compresses voice to 7Kbps whilst ensuring Quality of Service. As a consequence, regardless of whether they're located at a regional office, remote branch or even deployed to a location miles from civilisation, workers are able to communicate swiftly, clearly and securely with central control teams and send/receive data that enables them to fulfil their role.

## The VadOS operating system

The need to integrate multiple data sources does not have to require a complex and proliferated network infrastructure that is unwieldy and difficult to support. Vados Systems provides a single platform solution that provides all the benefits of reduced capital expenditure, simplified training and engineering resource efficiency.

The core component throughout the entire Vados Systems product range is the vadOS operating system. vadOS recognises the importance of each data stream as dictated by business need and assigns a level of service integrity and quality of service while dynamically managing bandwidth for optimal use. This approach to aggregating and delivering voice and other mission critical application data streams over the most efficient transport mechanism enables our customers to intelligently handle multiple protocol communication requirements with ease.

vadEDGE™ Hardware Specifications		vados™ Functional Specifications	
<p><b>Ethernet</b> Two x 2 x 10/100 Ethernet switches with 802.1Q or 4 x 10/100 Ethernet without 802.1Q</p> <p><b>High Speed WAN</b> 2 x High Speed WAN ports V.24, V.35, V.36, V.11, Sync (2Mbps) or Async (115Kbps)</p> <p><b>Analogue Voice Supervisory</b> 8 x FXS, FXO, E&amp;M Voice Ports 1 x RS232 control Port</p> <p><b>Encryption/Compression</b> (Optional) Supports DES or 3DES and LZS &amp; MPPC</p> <p><b>Power AC</b> Wide range AC input 85-260V Frequency:- 50-60 Hz Current Rating 1.5A</p> <p><b>Power DC (Optional)</b> DC voltage input - 36V to 70V Current Rating 2A</p> <p><b>Physical</b></p> <p><b>Height</b> 45mm</p> <p><b>Width</b> 430mm</p> <p><b>Depth</b> 270mm</p> <p><b>Weight</b> 4.5kg (Excluding cables)</p> <p><b>Environmental</b></p> <p><b>Operating Temperature</b> 5 to 45 degrees C</p> <p><b>Operating Humidity</b> 10% to 90% non-condensing</p> <p><b>Storage temperature</b> -30 to +50 degrees C</p> <p><b>Storage humidity</b> 10 to 90% non condensing</p> <p><b>Air pressure</b> 98kPa to 134kPa</p>	<p><b>Serial Link Support</b></p> <p>Standard: Vados V-TEs Frame Relay NNI/UNI, LMI (ANSI &amp; ITU) Switched &amp; PVC TCP/IP PPP (RFC 1331), SLIP TPAD PAP/CHAP &amp; MLP X.25 (1980 &amp; 1984), X.32 OSI Transport (Class 0, 2, 3) V.25bis Async port up to 115.2Kbaud (X.3, X.28, X.29) HDLC transparent pass-through Bandwidth management Auto link back-up, speed-detect &amp; Measure Link and Channel bonding</p> <p>Optional: IBM SDLC / QLLC APACs 30+40</p> <p><b>Terminal Emulation</b></p> <p>Standard: TCP Telnet (Client &amp; Server) Transparent Telnet (RFC 1006)</p> <p>Optional: IBM 3270 (inc.Kanji)</p> <p><b>Voice Support</b></p> <p>Standard: VoIP SIP, VoIP VTES, VoFR User selectable compression algorithms: G.711 PCM @ 64Kbps (uLaw or ALaw) G.727 E-ADPCM @ 16, 24, 32 or 40Kbps G.726 ADPCM @ 16, 24, 32 or 40Kbps G.723.1 MP-MLQ @ 5.3 or 6.3Kbps G.729 CS-ACELP @ 8Kbps NETCODER™ @ 6.4, 7.2, 8, 8.8 or 9.6Kbps G.165 Echo cancellation up to 16ms Silence compression or suppression with comfort noise generation User configurable voice and tone volume User configurable tones for different countries DTMF detection and generation Tone pair generation Bad frame interpolation Automatic voice/fax switching Fax and Modem Support Non-dial connect (PVC) Dial connect (Switched Frame Relay/ISDN) Time Break Recall (TBR) support TOS/DiffServe Analogue FXS</p> <p><b>Security</b></p> <p>Optional: AES 128/256</p> <p><b>IBM Networking</b></p> <p>Optional: SDLC QLLC Ethernet DLC IBM PU2.0 concentration</p>	<p><b>Bandwidth Optimisation</b></p> <p>V-TEs (VADOS Proprietary) IP/UDP Header compression IP/UDP/RTP Header compression Voice-frame multiplexing</p> <p>Optional: Hardware Data Compression (LZS, MPPC)</p> <p><b>TCP/IP Routing &amp; Ethernet Support</b></p> <p>Standard: MAC bridging, IP routing OSPF, RIP, RIP2 NAT/PAT OSI TP4 GOSIP CLNS/CONS BootP Client DHCP Server DHCP client IP/UDP encapsulation with DiffServ Port/Address Filtering Metro Ethernet 802.1q Ethernet trunk</p> <p>Optional: IPX routing, OSI ES-IS DLC local termination</p> <p><b>Satellite Networking</b></p> <p>Standard: Vados VTES SCPC, TDM/SCPC (Integral Support) TDMA (I-Direct, ViaSat, Hughes) Inmarsat BGAN/RBGAN Asymmetrical &amp; Symmetrical clocking Data Splitter/Combiner TCP Acceleration Serial VSAT Terrestrial Link Back up IP VSAT Terrestrial Link Back up</p> <p><b>Management Support</b></p> <p>Standard: Local async console (RS232) Virtual port for remote access SNMP (MIBs: MIB2 &amp; Enterprise) megaWATCH (SNMP Management) Billing and Accounting Local/Remote configuration, upload, download, TFTP Remote software download, TFTP RADIUS Internal protocol Data scope Menu and Presentation Service Security (Password, address validation)</p> <p>Optional: IBM Netview</p>	
<p><b>vadEDGE™ Ordering Information</b></p>			
<p><b>VE-4208a</b></p>	<p>vadEDGE 4208a 2 software selectable WAN interfaces (2Mbps Sync, 115kbps Async), two 2 Port 10/100 Ethernet switches and 8 FXS, FXO, E&amp;M voice ports</p>		



**Ultra Electronics**  
AEP  
Knave Beech Business Centre  
Loudwater  
High Wycombe  
Buckinghamshire, HP10 9UT  
Main Switchboard: +44 (0)1628 642 600  
Email: info@ultra-aep.com  
www.ultra-aep.com  
www.ultra-electronics.com