

# vadEDGE™ | 4208a

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.

## 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



## 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 Satellite Networks

## 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.

# Product Information

## 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	
Ethernet	Two x 2 x 10/100 Ethernet switches with 802.1Q or 4 x 10/100 Ethernet without 802.1Q	<b>Serial Link Support</b> <b>Standard:</b> Vados V-TES Frame Relay NNI/UNI, LMI (ANSI & ITU) Switched & PVC TCP/IP PPP (RFC 1331), SLIP TPAD PAP/CHAP & MLP X.25 (1980 & 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 & Measure Link and Channel bonding <b>Optional:</b> IBM SDLC / QLLC APACs 30+40	<b>Bandwidth Optimisation</b> V-TES (VADOS Proprietary) IP/UDP Header compression IP/UDP/RTP Header compression Voice-frame multiplexing  <b>Optional:</b> Hardware Data Compression (LZS, MPPC)
High Speed WAN	2 x High Speed WAN ports V.24, V.35, V.36, V.11, Sync (2Mbps) or Async (115Kbps)	<b>Terminal Emulation</b> <b>Standard:</b> TCP Telnet (Client & Server) Transparent Telnet (RFC 1006)  <b>Optional:</b> IBM 3270 (inc.Kanji)	<b>TCP/IP Routing &amp; Ethernet Support</b> <b>Standard:</b> 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  <b>Optional:</b> IPX routing, OSI ES-IS DLC local termination
Analogue Voice Supervisory	8 x FXS, FXO, E&M Voice Ports 1 x RS232 control Port	<b>Voice Support</b> <b>Standard:</b> 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	<b>Satellite Networking</b> <b>Standard:</b> Vados VTES SCPC, TDM/SCPC (Integral Support) TDMA (I-Direct, ViaSat, Hughes) Inmarsat BGAN/RBGAN Asymmetrical & Symmetrical clocking Data Splitter/Combiner TCP Acceleration Serial VSAT Terrestrial Link Back up IP VSAT Terrestrial Link Back up
Encryption/Compression	(Optional) Supports DES or 3DES and LZS & MPPC	<b>Management Support</b> <b>Standard:</b> Local async console (RS232) Virtual port for remote access SNMP (MIBs: MIB2 & Enterprise) megaWATCH (SNMP Management) Billing and AccountingLocal/Remote configuration,upload, download, TFTP Remote software download, TFTP RADIUS Internal protocol Data scope Menu and Presentation ServiceSecurity (Password, addressvalidation)  <b>Optional:</b> IBM Netview	
Power AC	Wide range AC input 85-260V Frequency:- 50-60 Hz Current Rating 1.5A		
Power DC (Optional)	DC voltage input - 36V to 70V Current Rating 2A		
<b>Physical</b>			
Height	45mm		
Width	430mm		
Depth	270mm		
Weight	4.5kg (Excluding cables)		
<b>Environmental</b>			
Operating Temperature	5 to 45 degrees C		
Operating Humidity	10% to 90% non-condensing		
Storage temperature	-30 to +50 degrees C		
Storage humidity	10 to 90% non condensing		
Air pressure	98kPa to 134kPa		
<b>vadEDGE™ Ordering Information</b>			
<b>VE-4208a</b>	vadEDGE 4208a 2 software selectable WAN interfaces (2Mbps Sync, 115kbps Async), two 2 Port 10/100 Ethernet switches and 8 FXS, FXO, E&M voice ports	<b>Security</b> <b>Optional:</b> Hardware based DES or Triple DES Encryption  <b>IBM Networking</b> <b>Optional:</b> SDLC QLLC Ethernet DLC IBM PU2.0 concentration	