



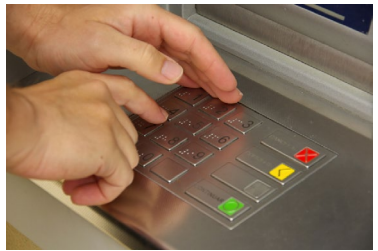





# M2M Critical Application Connectivity

The demanding requirements of utility, infrastructure and transportation applications mean that commercial grade routers are not sufficiently resilient, while specialised devices often lack the management and flexibility to cost effectively provide a scalable service. Virtual Access' Critical Application routers meet the resilience requirements with features such as multipath communications to avoid a single point of failure, integrated communications interfaces, harsh environmental standards, high isolation for power applications, legacy interfaces to migrate RTUs to IP without expensive upgrades, and advanced security; all centrally or cloud managed to provide a cost effective high quality scalable service to thousands or tens of thousands of sites.



Our customers include: Deutsche Telekom, BT, TeliaSonera, NTT, Belgacom, Telstra, STC.

| Markets   |   |
|---|---|
| <p><b>Infrastructure</b></p> <ul style="list-style-type: none"> <li>• Suitable for outdoor cabinets</li> <li>• High vibration, extreme temperature and EMC</li> <li>• Power, environmental sensors, access control</li> <li>• Automated provisioning &amp; central management</li> </ul>    | <p><b>Power</b></p> <ul style="list-style-type: none"> <li>• EN/IEC/BS standards for harsh environments</li> <li>• IP53 Ingress protection</li> <li>• IP65 power connectors</li> <li>• DIN rail mount with front or bottom facing connectors</li> <li>• High electrical isolation</li> <li>• Multipath connectivity</li> </ul>  |
| <p><b>Automotive</b></p> <ul style="list-style-type: none"> <li>• Ignition sense, battery save timer &amp; surge suppression</li> <li>• Automotive carrier for ease of installation</li> <li>• IP-rated with dual radio</li> <li>• GPS antenna &amp; location server interface</li> <li>• WiFi zone captive portal/walled-garden</li> </ul>  | <p><b>Utilities</b></p> <ul style="list-style-type: none"> <li>• DSL with 3G/LTE backup</li> <li>• Dual and triple path communication</li> <li>• Metal or plastic case</li> <li>• 8 point Ethernet switch</li> <li>• IP65 power connector</li> <li>• Automated provisioning &amp; central management</li> </ul>                |
| <p><b>Financial Transactions</b></p> <ul style="list-style-type: none"> <li>• Advanced security and routing functions</li> <li>• PCI DSS compliant</li> <li>• Dual and triple path communication</li> <li>• Dual SIM</li> <li>• SLA reporting</li> <li>• Automated provisioning &amp; central management</li> </ul>                          | <p><b>Extreme Environments</b></p> <ul style="list-style-type: none"> <li>• Rugged devices</li> <li>• Extreme temperature options</li> <li>• Wide range of power options</li> <li>• Vibration resistant</li> <li>• Electrically isolated</li> </ul>    |
| <p><b>M2M for Legacy</b></p> <ul style="list-style-type: none"> <li>• Migrate legacy M2M systems to a fully supported IP/Ethernet network without disrupting customers</li> <li>• Multiple serial interface options</li> <li>• Automated provisioning &amp; central management</li> </ul>    | <p><b>Emergency Vehicle Connectivity</b></p> <ul style="list-style-type: none"> <li>• Triple radio: dual 4G radio &amp; WiFi</li> <li>• IP-rated metal case</li> <li>• 8000Mbps processor, 2 Gbytes flash</li> <li>• 4 x GE</li> <li>• Ignition sense PSU, active power</li> <li>• GPS</li> </ul>                              |

## Key Benefits


|   |   |
|---|---|
| ✓ | Suitable for outdoor cabinet installations  |
| ✓ | Rugged environmental requirements - EN standards for harsh environments                   |
| ✓ | Advanced routing and security functions   |
| ✓ | SLA reporting and transaction logging functionality                                       |
| ✓ | IP-rated and vehicle mounting options   |
| ✓ | DIN rail mounting with front or bottom facing connectors option for the industrial market |
| ✓ | Insulated plastic case option   |
| ✓ | Resilient solutions using multipath communication options                                 |
| ✓ | Dual SIM and dual radio module options  |
| ✓ | Seamless IP migration for serial, leased line and other legacy interfaces                 |
| ✓ | Cloud or VPN central management reduces deployment and ongoing management costs           |
| ✓ | Simplifies installations, reduces project roll-out times                                  |
| ✓ | Northbound interfaces for OSS integration and automation                                  |

## Device Summary

| Router  | Eth  | Dual Radio | 3G 4G | DI/ DO | CDMA 450 | Dual SIM | WiFi | GPS | IP Rating | Mounting    | DSL/ SHDSL | RS232 RS485 | E1/T1 Sync Serial | ALL | Ext Temp |
|---------|------|------------|-------|--------|----------|----------|------|-----|-----------|-------------|------------|-------------|-------------------|-----|----------|
| GW1100  | 1    |            | ●     |        |          | ✓        | ✓    | ✓   | IP20      | Vehicle/DIN |            |             |                   |     | ●        |
| GW2020  | 1-2  |            | ●     |        | ●        | ✓        |      |     | IP20      |             |            | ●           |                   |     | ●        |
| GW2024P | 2    |            | ●     |        | ●        | ✓        |      |     | IP33      | DIN         |            | ✓           |                   |     | ●        |
| GW2028  | 4    |            | ●     | ✓      | ●        | ✓        |      |     | IP51      | DIN         |            | ✓           |                   |     | ●        |
| GW3300  | 4 GE | ●          | ✓     |        | ●        | ✓        | ✓    | ✓   | IP31      | Vehicle/DIN |            | ●           |                   |     | ●        |
| GW3400  | 2 GE | ●          | ✓     |        | ●        | ✓        | ✓    | ✓   | IP65      | Vehicle/DIN |            | ●           |                   |     | ●        |
| GW6600  | 4    |            | ●     |        | ●        |          | ●    |     | IP20      | DIN         | DSL        |             |                   |     | ●        |
| GW6800  | 4    |            | ●     |        |          |          |      |     | IP20      |             | SHDSL      |             |                   |     |          |
| GW7300  | 8    |            | ●     |        | ●        | ✓        |      |     | IP53      | DIN         | DSL        | ✓           |                   |     | ●        |
| GW7600  | 4    | ●          | ●     |        | ●        | ●        | ●    |     | IP20      | Rack        | ●          | ●           | ●                 | ●   | ●        |
| GW8000  | 4    |            | ●     |        | ●        |          |      |     | IP20      | Rack        | DSL        |             | ●                 | ●   | ●        |
| GW9000  | 4    |            | ●     | ●      | ●        |          |      |     | IP20      | Rack        | DSL        | ●           | ●                 |     | ●        |

● = optional

## Virtual Access M2M Critical Application Routers

|   |  |   |
|---|--|---|
|  |   |  |
| GW1100  | GW2024P  | GW2028  |
|  |  |  |
| GW3300  | GW6600   | GW7300  |