

OptiBond



Multi-Cellular 5G & 4G Routers
INTELLIGENT SD-WAN CONNECTIVITY

ems
CONNECTIVITY SOLUTIONS

i-mo
intelligent
mobileoffice



5G Applications

- Sports Broadcasters
- Outdoor Events
- CCTV
- Policing
- Energy & Utilities


**Streaming
Video**

**Rapid Site
Setup**

- Construction Sites
- Outdoor Events
- Emergency Services
- Energy & Utilities

**Network
Resilience**

- Banking & Finance
- Security
- Retail & POS
- ISP

OptiBond 

- Mobile libraries
- Social Services
- Health Screening
- Emergency Services
- Utilities

**Mobile
Services**

**Machine
2
Machine**

- Remote Retail & POS
- Security
- Internet of Things
- Wind Farms & Oil Rigs



OptiBond

Technology Features

- Intelligent aggregation of multiple wired and wireless bearers for maximum performance & resilience. Connect to 5G (i-MO 225), 4G, 3G, DSL, WiFi, satellite etc.
- Automatic failover / fallback between wired and wireless connections
- Up to three 5G (i-MO 225), or 4G LTE modems can be embedded with the facility to select from up to six mobile data network SIMS



- Secure VPN from appliance to Head Office
- Secure WiFi or Ethernet access for users
- Options include File Share, VoIP PABX & IP CCTV
- i-MO units can be provided either as a Managed Service or, alternatively, deploy our Virtual Concentrator in a maintained environment (e.g. your Data Centre) and deliver your own bonding services





225 Series 5G

| Multi-Cellular Router

[VIEW](#)



Key Features

- 2 x 5G cellular modems
- Up to 4 cellular SIMs with intelligent switching – support for all primary mobile networks
- 2 GB Ethernet ports - WAN/LAN
- OptiBond® intelligent bandwidth aggregation
- Integrated stateful multi-zone Firewall
- IPSEC VPN
- Web UI and CLI administrative interface





225 Series 5G

| Multi-Cellular Router

VIEW



Technical Specifications

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Technical Specifications

225 Series

Format	Mobile / Desktop
Dimensions (WxHxD)	185 x 65 x 195 mm
Weight	1.8 Kg
Status	Power LED
USB	2 x USB 2.0
Cellular Data Connectivity	2 x 5G Compatible Modems
Antenna Connectors	8 x SMA - 8 x Cellular/MiMo
LAN / WAN Interface	2 x Gigabit Ethernet (Max 1 x WAN)
Power Input	12VDC +/- 5%
Power Supply	External AC Adapter 100 - 240 VAC (47 - 63Hz)
Max Power Consumption	Estimated power consumption : 25W
Operating Temperature	-20°C to +60°C
Storage	Room Temperature
Humidity	10% to 90% (non-condensing)
CPU	Intel® Atom N2800
Max Throughput	950Mbps (> 150 Mbps with VPN)
Memory	2 Gb
Storage	32 Gb



210 Series 4G

| Multi-Cellular Router

VIEW



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- Up to 4 cellular SIMs with intelligent switching – support for all primary mobile networks
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210 Series 4G

| Multi-Cellular Router

VIEW



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Case Studies – Construction & Related Industries



The construction and related industries often have to operate at remote, temporary, mobile or new locations. Providing a secure instant office environment, with full data connectivity is vital, particularly during the early stages of a job.

Very often the length of time needed for landlines to be installed is too long and expensive in remote, temporary or new locations such as construction or civil engineering sites. Additionally, the latency issues associated with data satellite channels can mean real issues running your mission critical interactive applications.

Having the ability to bond multiple data channels to provide a secure, resilient data feed is something many organisations in the sector spend a lot of time and effort looking for.



225 Series 5G

[VIEW](#)

| Multi-Cellular Router





Case Studies – Blue Light Services



OptiBond

In recent years there has been dramatic growth in the use of UAV / Drones for numerous applications in sectors as diverse as warfare, security and construction.

Streaming video, audio and other information to a ground controller is established technology; but reliably transmitting that on across the internet for review / decision making by remote personnel is more of a challenge.

i-MO OptiBond™ Professional Bonding Routers address the issues of maximising available bandwidth and 100% resilience by aggregating and balancing your combined internet access, eg diverse 4G services, fixed line services, satellite etc.



225 Series 5G

| Multi-Cellular Router

VIEW



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Case Studies – Transport Industries



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Transport companies routinely have to provide secure, reliable internet connectivity wherever customers access their services.

Whether for ticketing and CCTV over watch at remote locations, resilience at major hubs or connectivity during facility rebuilds, i-MO OptiBond™ offers the ability to manage and bond multiple data channels to provide a secure, resilient data feed almost anywhere and any time.



225 Series 5G

| Multi-Cellular Router

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Case Studies – Logistics Industries



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In today's world of “have it now” online ordering reliable connectivity is of critical importance for the logistics specialists charged with ensuring the availability of stock for retailers and others.

The supply chain needs to ensure that operations stay online if primary leased line connectivity fails. Equally the current Covid 19 Pandemic has driven a surge in demand for temporary warehouse space. Such facilities often have no “live” connectivity and the provisioning of leased lines etc may involve lead-times of many weeks or months along with extended contractual commitments and very considerable expense.



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About EMS & OptiBond

United Kingdom company founded in 1999 and based in Hampshire.

Specialist in provision of connectivity in difficult to serve, new and temporary locations.

Corporate Customers include: Tarmac, DHL, Clipper Logistics (for the NHS), Taylor Wimpey, Warwickshire County Council, London Boroughs of Barnet and Hillingdon, Whitehill & Bordon Regeneration Company



Founded in 1999, we remain independently owned and operated.



Stable and here for the long-term with sustainable, organic growth.



We provide services across networking and connectivity, cloud and communications.

OptiBond

Award winning service



DERBYSHIRE
CONSTABULARY



wood.

gleeds



Taylor
Wimpey



Balfour Beatty