

# SECTION 8 - New Products - Wireless

# E&J

Services Limited

## Trinity-323TDD



|                               | Trinity-323TDD   | Trinity-323TDD Plus  |
|-------------------------------|--|--|
| <b>Radio</b>                  |  |  |
| Frequency Bands               | 5.150 – 5.845 GHz  | 5.150 – 5.845 GHz  |
| Channel widths supported      | 10/20 MHz  | 10/20/40 MHz   |
| Capacity                      | 100 Mbps   | 190 Mbps   |
| Duplex Technique              | TDD  | TDD  |
| Modulation                    | OFDM, BPSK/QPSK/16QAM/64QAM  | OFDM, BPSK/QPSK/16QAM/64QAM  |
| Max Tx Power                  | 23 dBm   | 23 dBm   |
| Max Rx sensitivity            | -97 dBm  | -97 dBm  |
| Error Correction              | FEC; k=1/2, 2/3, 3/4, 5/6  | FEC; k=1/2, 2/3, 3/4, 5/6  |
| Encryption                    | 128 bit AES & MAC level Authentication   | 128 bit AES & MAC level Authentication   |
| Surge Protection              | 15kV   | 15kV   |
| Antenna Protection            | Internal DC Grounding  | Internal DC Grounding  |
| DFS                           | Yes  | Yes  |
| QoS                           | Four Access Categories (AC) Voice, Video, Best Effort, and Background<br>Traffic classification according to WMM | Four Access Categories (AC) Voice, Video, Best Effort, and Background<br>Traffic classification according to WMM |
| Bandwidth control             | Yes  | Yes  |
| <b>Internal Antenna</b>       |  |  |
| Gain                          | typ. 23 dBi  | typ. 23 dBi  |
| VSWR                          | max. 1.5:1   | max. 1.5:1   |
| 3 dB Beam-Width, H-Plane      | 7°   | 7°   |
| 3 dB Beam-Width, V-Plane      | 7°   | 7°   |
| Polarization                  | Horizontal and Vertical  | Horizontal and Vertical  |
| Connector                     | N/A  | N/A  |
| Antenna Cable                 | N/A  | N/A  |
| <b>Ethernet Interface</b>     |  |  |
| Type                          | 10/100/1000 BaseT Interface with Auto-negotiation (IEEE 802.3), Manual   | 10/100/1000 BaseT Interface with Auto-negotiation (IEEE 802.3), Manual   |
| Number of Ethernet Ports      | 1  | 1  |
| Framing/Coding                | IEEE 802.3u  | IEEE 802.3u  |
| Traffic Handling              | MAC layer bridging, self learning, 802.1q transparent  | MAC layer bridging, self learning, 802.1q transparent  |
| Data Latency                  | < 2ms (typical)  | < 2ms (typical)  |
| Packets/second                | > 40 000   | > 40 000   |
| VLAN ID for Management        | Supported  | Supported  |
| Power over Ethernet Connector | 48V DC, 802.3af, <6W typical<br>RJ-45  | 48V DC, 802.3af, <6W typical<br>RJ-45  |
| <b>Management</b>             |  |  |
| Link Management Protocol      | Web interface<br>SNMP  | Web interface<br>SNMP  |
| NMS Application               | Repeatit Cloud Network<br>RCS Management Service   | Repeatit Cloud Network<br>RCS Management Service   |
| Tools in web interface        | Spectrum Analyser<br>Speed Test  | Spectrum Analyser<br>Speed Test  |
| <b>Environment</b>            |  |  |
| IP Code                       | IP65   | IP65   |
| Temperature                   | -40° / +55° C  | -40° / +55° C  |
| Size                          | 370 x 370 x 40 mm  | 370 x 370 x 40 mm  |
| Weight per unit               | 2.7 Kg   | 2.7 Kg   |

| Distance | Trinity-323TDD | Trinity-323TDD Plus | Trinity-300TDD Plus |
|----------|----------------|---------------------|---------------------|
| < 2 km   | 100 Mbit       | 190 Mbit            | N/A                 |
| 3 km     | 100 Mbit       | 190 Mbit            | N/A                 |
| 4 km     | 100 Mbit       | 190 Mbit            | N/A                 |
| 5 km     | 100 Mbit       | 185 Mbit            | N/A                 |
| 6 km     | 100 Mbit       | 180 Mbit            | N/A                 |
| 7 km     | 100 Mbit       | 125 Mbit            | N/A                 |
| 8 km     | 100 Mbit       | 124 Mbit            | N/A                 |
| 9 km     | 100 Mbit       | 122 Mbit            | N/A                 |
| 10 km    | 100 Mbit       | 120 Mbit            | N/A                 |
| 15 km    | 80 Mbit        | 80 Mbit             | N/A                 |
| 20 km    | 60 Mbit        | 60 Mbit             | N/A                 |

Throughput UDP, 30dB max ETSI EIRP, 6dB margin

**e-mail: [sales@eandjservices.co.uk](mailto:sales@eandjservices.co.uk)**