Lanner Whitebox Solutions and Turnium Technology Group Inc have partnered to deliver a robust universal customer premise equipment (CPE) solution that provides private, secure multi-site networking, link aggregation or bonding with session preservation, and seamless wireless failover options.

Multi-site business and enterprise need cost-effective, reliable internet and networks at every office, branch, warehouse, and fleet vehicle. Lanner and Turnium deliver multi-carrier network bonding, including wireless failover, at each customer location to deliver a complete business continuity solution.

The package includes Lanner’s L-1515 platform with Intel® Atom® C3000 processor, onboard LTE or 5G modems, and Turnium’s network bonding software. This combination enables enterprises, telecommunications, and internet service providers to deploy multi-carrier and multi-transport customer networks easily and quickly.

Lanner has a portfolio of CPE devices supporting S-M-L-XL deployments that range from Atom – Xeon performance.

**Lanner uCPE L-1515 Product Features**

- Intel® Atom® C3000 Processor (Denverton)
- Max. 4x RJ45, 2x SFP & 2x RJ45 (By SKU)
- 2x 260-pinDDR4 2400/2133/1866MHz ECC/Non-ECC SODIMM (by SKU), Max. 64GB
- Design ready for 5G Sub-6 and WiFi 6
- 1x RJ45 Console, 2x USB 2.0
- 2x Mini-Pcie, 1x M.2 2242 B Key, 2x Nano SIM for M.2
- 1x 2.5” Drive Bay (Optional)
- Supports TPM 2.0
- 1 x Cooling Fan w/ Smart Fan (SKU A-E) or 2 x Cooling Fans w/ Smart Fan (SKU F)
Turnium Network Bonding

- Multi-site private, routed networking solution
- >90% link aggregation / bonding efficiency from multiple transport circuits (xDSL, Cable, Fiber, Fixed Wireless, 3G/4G/LTE/5G)
- Sub-second failover across multiple bonded circuits with IP address management maintains voice, video, and application sessions
- Per-packet load balancing across multiple circuits
- Bi-directional encryption (AES128, AES256)
- Bandwidth Adaptation to mitigate the effects of network congestion
- Quality of Service

- Bare metal (Debian, openSUSE Leap), virtual, and container (Kubernetes, Red Hat OpenShift®) deployments
- Active/active or active/standby with multiple WAN circuits for all circuit types
- Multi-tenanted application support multiple customers and sites per core node
- Centralized Management Server for remote command, control, configuration and reporting
- RESTful API for integration into existing network management, reporting, and billing systems

Ordering Information

Order online: www.whiteboxsolution.shop

<table>
<thead>
<tr>
<th>SKU</th>
<th>PN</th>
<th>Spec</th>
<th>Variants</th>
<th>Bundle</th>
<th>Accessories</th>
<th>Excludes</th>
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<tbody>
<tr>
<td>Small with LTE (NA/AMEA)</td>
<td>MN: L-1515B-4C-8E-128M-C1-TN1</td>
<td>128G SSD, 6 port GBE, 2 port SFP, SRIOV (x6), w/TPM2.0 includes LTE kit &amp; fixed BIOS &amp; DMI table settings.</td>
<td>1515B: 6G C3958 (Dentonron), 8GB DDR4 2400 ECC</td>
<td>Turium Network Bonding - 12 month subscription</td>
<td>Rack Mount Kit, Standard black nameplate</td>
<td>WiFi module. SW image load. All other accessories sold separately</td>
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<tr>
<td>Medium with LTE (NA/AMEA)</td>
<td>MN: L-1515A-BC-16G-128M-C1-TN1</td>
<td>128G SSD, 6 port GBE, 2 port SFP, SRIOV (x6), w/TPM2.0 includes LTE kit &amp; fixed BIOS &amp; DMI table settings.</td>
<td>1515A: 8G C3958 (Dentonron), 16GB DDR4 2400 ECC</td>
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<td>Large with LTE (NA/AMEA)</td>
<td>MN: L-1515F-16C-16G-128M-C1-TN1</td>
<td>128G SSD, 6 port GBE, 2 port SFP, SRIOV (x6), w/TPM2.0 includes LTE kit &amp; fixed BIOS &amp; DMI table settings.</td>
<td>1515F: 16G C3958 (Dentonron), 16GB DDR4 2400 ECC</td>
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<td>Small Broadband (no LTE)</td>
<td>MN: L-1515B-4C-8E-128M-TN1</td>
<td>128G SSD, 6 port GBE, 2 port SFP, SRIOV (x6), w/TPM2.0 includes LTE kit &amp; fixed BIOS &amp; DMI table settings.</td>
<td>1515B: 4G C3958 (Dentonron), 8GB DDR4 2400 ECC</td>
<td>Turium Network Bonding - 12 month subscription</td>
<td>Rack Mount Kit, Standard black nameplate</td>
<td>WiFi module. SW image load. All other accessories sold separately</td>
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<td>MN: L-1515A-8C-16G-128M-TN1</td>
<td>128G SSD, 6 port GBE, 2 port SFP, SRIOV (x6), w/TPM2.0 includes LTE kit &amp; fixed BIOS &amp; DMI table settings.</td>
<td>1515A: 8G C3958 (Dentonron), 16GB DDR4 2400 ECC</td>
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| Turnium SW Bonding Tool | MN: TBD  | Turium Network Bonding option - SW only 12 month subscription
  - Multi-site private, routed networking solution
  - >90% link aggregation / bonding efficiency from multiple transport circuits (xDSL, Cable, Fiber, Fixed Wireless, 3G/4G/LTE/5G)
  - Sub-second failover across multiple bonded circuits with IP address management maintains voice, video, and application sessions
  - Bandwidth Adaptation to mitigate the effects of network congestion

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