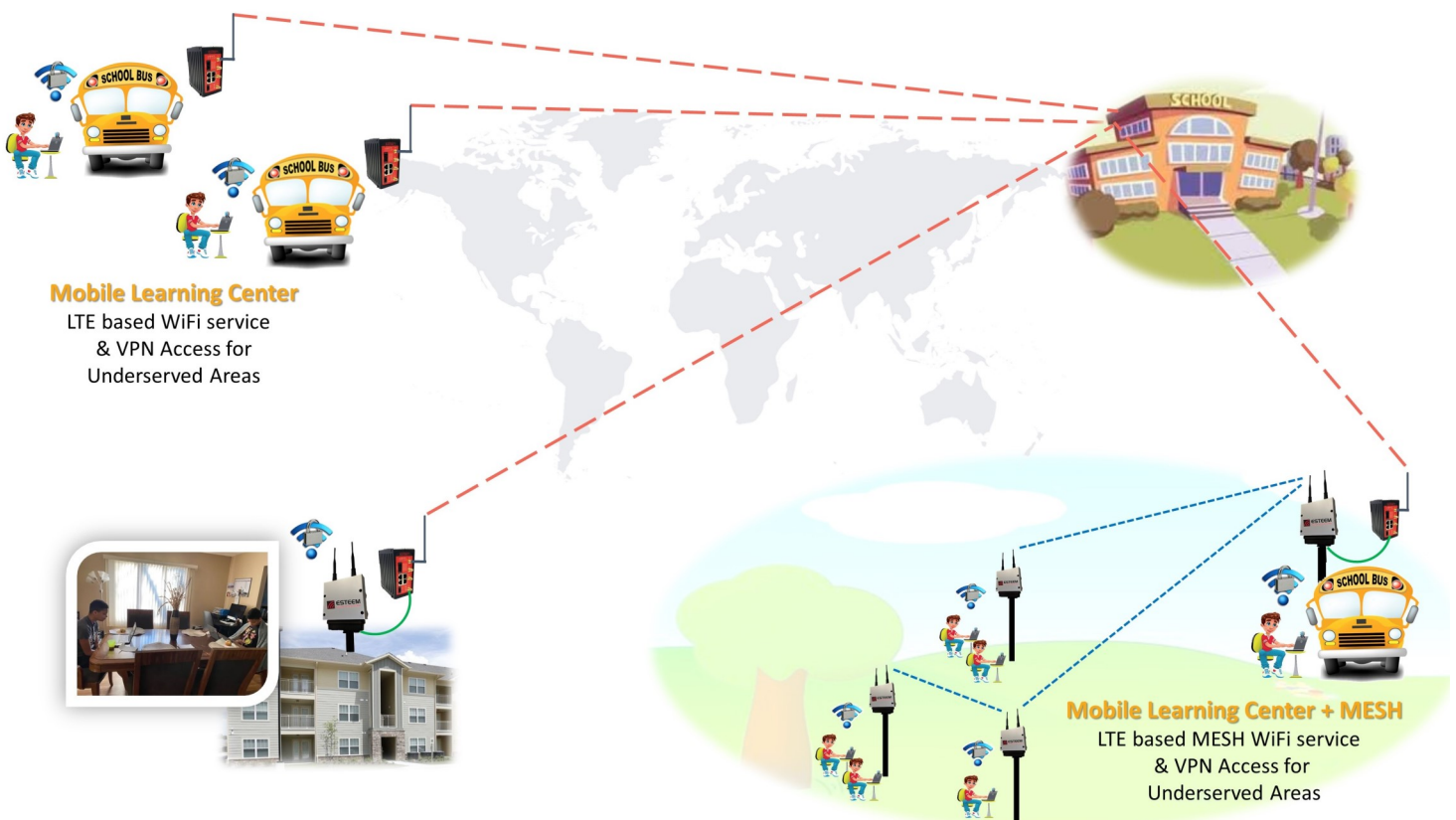


**ESTeem's Edge Access +** brings unprecedented possibilities for Education Administrators having to manage their networks and deliver online solutions. The benefits and necessity have never been more evident, but on-line education faces unique challenges compared to traditional campus centric learning. Secure internet connectivity is the lifeblood for on-line education.

**ESTeem's Edge Access +** is an ideal solution for remote learning. By creating Mobile Learning Centers (with or without secure VPN connections) the **Edge Access +** delivers reliable and secure remote connectivity for students and faculty.



- The **ESTeem Edge Access+** uses LTE connections as WiFi Access Points (AP) providing reliable and secure internet connectivity to underserved areas.
- Expand your WiFi coverage outside the bus by adding an ESTeem Horizon 2.4 MESH network. Instant Mobile Learning Center campus!
- Additional option of creating Simple, Direct, Encrypted VPN connections to your existing network.
- Industrial grade design: robust and fan less enclosure, integrated DIN rail bracket and industrial screw-on DC power connector



\* Specifications subject to change without notice



## Ports

- 1 x USB 2.0, type A
- 1 x RJ-45 WAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- 3 x RJ-45 LAN connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- LAN3 can be assigned as Service connection, 10/100 Mb/s, auto-negotiation (MDI / MDI-X)
- Ethernet port isolation: 1500 Vrms 1 minute (when device frame connected to system ground potential)

## Connections

- 12-48V DC (+/-20%), reverse polarity protected
- Device frame connector
- 2 x WiFi antenna connector, RP-SMA Female
- (TBL5i\*) 2 x LTE antenna connectors, SMA Female
- 2 x Digital Input, 2 x Digital Output, 24V DC out
- DIN rail attachment (back)
- Maximum power consumption 10W

## WAN connection features

- Independent of operating systems
- Works in all Internet connections (operator independent)
- Supports HTTP proxy servers with and without authentication
- Firewall friendly
- Works with dynamic, static and private IP addresses
- Built-in firewall, NAT
- Up to 50 concurrent VPN connections
- VPN throughput up to 70 Mbit/s

## Mobile connection features

- Supported External USB modem: TOSIBOX® 4G modem (TB4GM2EU, TB4GM2AU).
  - TosiOnline™ Automatic network recovery that recovers from most mobile operator and modem problems
  - Dual SIM
- TBL5iC\*
- Region: US/CAN
  - LTE Cat-6
  - Up to 300 Mbps DL, 50 Mbps UL
  - Frequency Bands (4G LTE): B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B41
  - Dual SIM

## WLAN

- IEEE 802.11 b/g/n, max. 150 Mbps
- WEP, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK Mixed, WPA-EAP, WPA2-EAP TKIP/AES encryption
- Frequency 2.412 – 2.462 GHz, 11 channels
- Output power 20 dBm max

## Included accessories

- RJ-45 Cat5e Ethernet cable
- 2 x WiFi antennas, 2 dBi
- I/O connector plug
- Power connector plug
- TBL5\*PS: AC adapter - Input 100 – 240 V AC, frequency 47 – 63 Hz, Output 12.0 V, 1.6 A, max 19.2 W. EU, UK, AU and US power socket
- TBL5\*PS: DC feed cable
- TBL5iC\*: US/CAN modem
- TBL5i\*: 2 x LTE antennas

## I/O specifications

- 2 x digital inputs, galvanic isolation, current limited to <5mA, Voltage 0 - 32V nom. >12V is interpreted as '1', 0-5V is '0'
- 2 x digital outputs, 24V DC, 50 mA current shared by the outputs and 24V DC out
- 1 x 24V DC out, 50 mA current shared by 24V DC out, output 1 and output 2
- Software Configurable I/O state

## Physical properties

- 110 mm x 58 mm x 127 mm / 4.33" x 2.28" x 5.0" (L x W x H)
  - Storage temperature -40 °C ... +70 °C / -40 °F ... +158 °F
  - Protection class IP20
- TBL5\*
- Weight 495 g / 1.09 lbs (net weight article)
  - Operating temperature -20 °C ... +60 °C / -4 °F ... +140 °F
- TBL5i\*
- Weight 505 g / 1.11 lbs (net weight article)
  - Operating temperature -20 °C ... +60 °C / -4 °F ... +140 °F