TERADEK LINK PRO

LINK PRO SYSTEM USER GUIDE

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TABLE OF CONTENTS

Physical Properties 3
Getting Started 5
Connect to a Network 5
Node 6
Connect Nodes to Link Pro 6
Bonding Configuration 7
Network Configuration 8
Link Pro Backpack 9
Link Pro Radome 10
Technical Specifications 11
Support Resources 13
Disclaimer 13
Warning 13
FCC Statement 13
EC Declaration of Conformity 13

PHYSICAL PROPERTIES

Link PRO

A: USB port 5
B: Port status
C: Battery status
D: Power switch
E: 5 GHz status
F: 2.4 GHz status
G: Bonding status
H: Fault/Error
I: WAN status
J: LAN status
K: Power status
L: Reset button
M: WAN port
N: LAN port
O: USB port 6
P: Power input
Q: Node inputs
R: 2.4/5GHz Wi-Fi antenna connectors
S: 1/4"-20 threaded mount

Link Pro LED Operation

B: Port status
On - Connected
Off - Not connected

C: Battery status
On - Charging
Off - Not charging/full
Blinking - Battery error

E/F: Wi-Fi status
On - Connected
Off - Not connected

G: Bonding status
On - Bonding
Off - Not bonding

H: Fault/Error
On - Error

I: WAN status
Off - Not connected
Blinking - Active

J: LAN status
Off - Not connected
Blinking - Active

K: Power status
On - Power On
Off - Power Off

NODE

A: 4-pin data/power input
B: SMA connectors
C: Power indicator
D: Network indicator
E: SIM card slot
F: 4-40 threaded mount
G: 1/4"-20 threaded mount

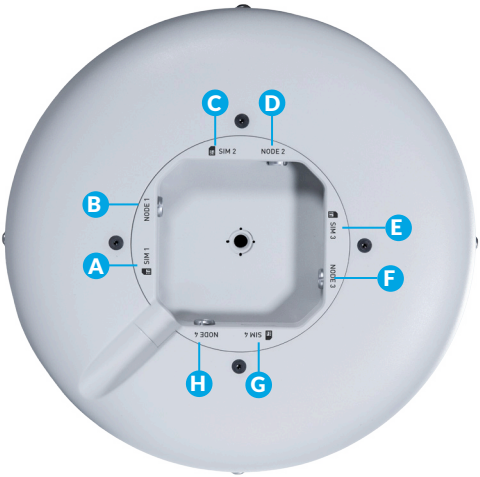
Teradek regularly releases new firmware versions to improve performance, add new features, or to fix vulnerabilities. Visit https://www.teradek.com to update your device with the latest firmware.

LINK PRO BACKPACK

A: Link Pro assembly
B: Wi-Fi antenna connectors
C: Node assembly 1
D: Node assembly 2
E: Node assembly 3
F: Node assembly 4
G: Battery mount

LINK PRO RADOME

A: SIM card slot 1
B: 4-pin data/power input 1
C: SIM card slot 2
D: 4-pin data/power input 2
E: SIM card slot 3
F: 4-pin data/power input 3
G: SIM card slot 4
H: 4-pin data/power input 4



NEED MORE HELP?
Support: http://support.teradek.com → Contains tips, information and all the latest firmware & software updates.
TERADEK SUPPORT STAFF: support@teradek.com or call 888–941–2111 ext2 (Mon–Fri 6am to 6pm PST)

GETTING STARTED

Link Pro packs professional network bonding into a high performance Wi-Fi access point, giving broadcasters, production companies, and first responders reliable, high speed Internet access at any location.

Assembly and Power

1. Attach the Wi-Fi antennas.
2. If using Link Pro with a cable/DSL modem, connect an Ethernet cable between the modem and Link Pro's WAN port.
3. Connect power to Link Pro using the included A/C adapter, or if the device is equipped with a battery plate accessory, install a compatible battery (Gold or V mount).

Reset button

If necessary, you can restore Link Pro to its original settings by inserting a paper clip into the recessed button **(L)**, then holding it down for five seconds.

CONNECT TO A NETWORK

Connect via Wi-Fi

1. Connect to one of Link Pro's Wi-Fi networks: **Link-Pro-XXXXX** or **Link-Pro-XXXXX 5G** (XXXXX is the last five digits of the device's serial number).
2. Open a web browser and navigate to https://172.16.2.1.

Wi-Fi DEFAULTS	
SSID (2.4GHz)	Link-Pro-XXXXX
SSID (5GHz)	Link-Pro-XXXXX 5G
Password	link051XXXXX
LAN IP Address	172.16.2.1

Connect via Ethernet

1. Connect an Ethernet cable between your computer or a network switch and Link Pro's LAN port. **Note: If connecting Link Pro to a network with existing DHCP server, you must disable Link Pro's built-in DHCP server.**
2. Open a web browser and navigate to Link Pro's IP address.
3. Log in to Link Pro's configuration interface using the default credentials shown to the right.

LOG-IN DEFAULTS	
Web UI username	admin
Web UI password	admin

NODE

Node is a small yet effective cellular modem solution that provides exceptional connectivity in regions around the world, allowing video professionals to broadcast over 3G, 4G, and 4G LTE networks.

Assembly and Power

NOTE: Node powers up and connects to the cellular network automatically when connected to Link Pro.

1. Attach two SMA mount antennas (either compact or high gain) to each Node.
2. Remove the SIM cover plate and insert a SIM card into the slot of each Node. Replace the cover plate and screw.
3. Connect Node(s) to Link Pro using the included 18” 4-pin to 4-pin cables.
4. Node’s power LEDs should illuminate immediately. The network LEDs will also illuminate once an Internet connection is established.

CONNECT NODES TO LINK PRO

You can use up to four Teradek Nodes to increase your bandwidth and establish an Internet connection when another connection is unavailable.

1. Connect each Node to Link Pro using an 18" 4-pin to 4-pin cable.
2. Node’s power LED should illuminate immediately. The network LED will also illuminate once an Internet connection is established.

BONDING CONFIGURATION

After connecting to the device's web UI, Link Pro needs to be connected to a Core account with an active Hotspot subscription. Connecting Link Pro to Hotspot increases your bandwidth and reliability by bonding multiple Internet connections. To take advantage of these features, visit hotspot.teradek.com and sign up for a Hotspot subscription, or sign up from your existing Core account by selecting a subscription plan from the **Manage Account** page.

Configure Core Settings

1. From the top menu of the web UI, enter the Cloud menu, and select **Configuration**.
2. Select **Core** as the service, then click **Save & Apply**.
3. Click **Configure Core Account**, then enter your credentials (Fig.1).
4. Select a company from the scroll-down menu, then click **Choose Company**.
5. Click the **Cloud Configuration** shortcut button, select a region, then click **Save & Apply.** (Fig.2).
6. Once a connection is established, you can view Link Pro's data usage and transfer statistics by accessing the Hotspots index from the Core dashboard.

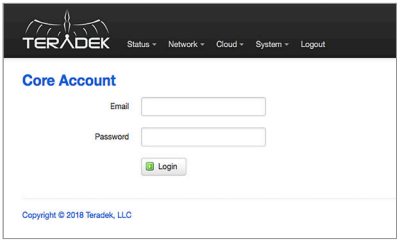


Fig. 1

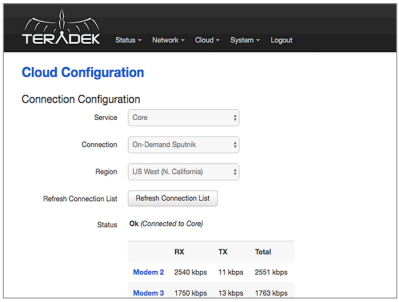


Fig. 2

View Hotspot Statistics

1. From the Core dashboard, tap the **Inventory** button and select **Hotspots** to view the Hotspots index (Fig.3).
2. Tap the **Details** button to see network statistics such as data usage, data rate, and connection status (Fig.4).

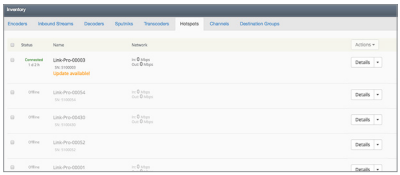


Fig. 3

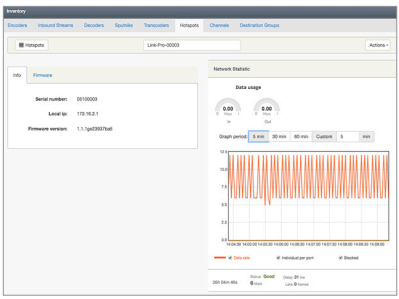


Fig. 4

For more information on configuring streams, recording, and configuring devices via Core, visit https://core.teradek.com.

NETWORK CONFIGURATION

Configure Wireless Settings

From the top menu on the web UI, navigate to the **Wireless Network** page, then click **Configure** next to the network you want to set up.

Each wireless configuration page (Fig. 5) contains options to configure the Wi-Fi channel, network mode (802.11a/b/g/n/ac), channel bandwidth or HT Mode, SSID, and security options. After modifying any settings, click **Save** if you plan to make more changes, or **Save and Apply** to enable the new configuration.

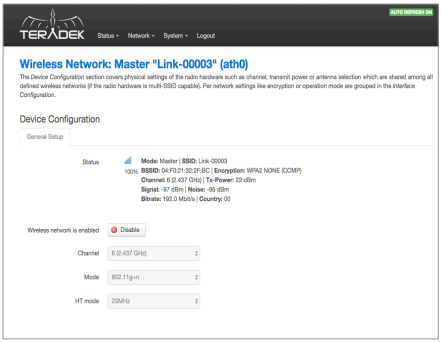


Fig. 5

Configure Local Network (LAN) Settings

The **LAN Configuration** page (Fig.6) contains Link Pro's IP address settings, DHCP server configuration, and other settings that may need to be changed if connecting Link Pro to another network. These settings do not need to be modified if Link Pro is used as a stand-alone access point.

When connecting Link Pro to another network with an existing DHCP server, uncheck the box next to 'Enable DHCP server' before connecting Link Pro to the other network to avoid IP address conflicts.

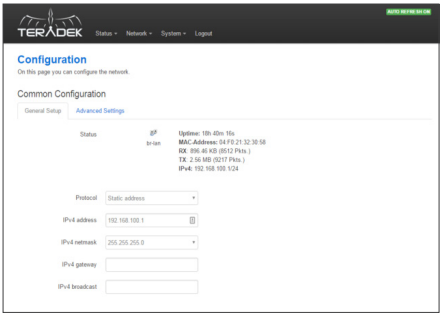


Fig. 6

Configure Internet (WAN) Settings

The WAN port allows you to connect Link Pro to a cable/DSL modem for Internet connectivity. In most cases, WAN settings will be auto-negotiated when Link Pro is connected to the modem. The **WAN Configuration** page (Fig.7) contains a number of advanced options that may be necessary to establish an Internet connection with some service providers.

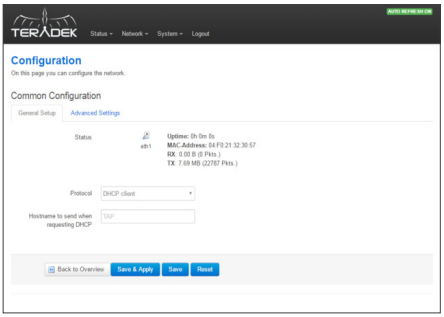


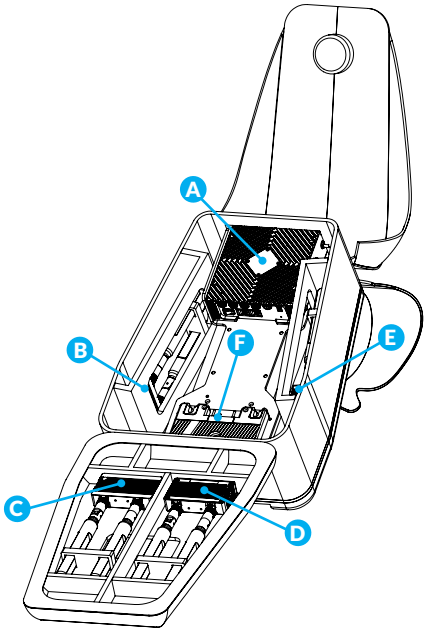
Fig. 7

LINK PRO BACKPACK

Bring high speed Internet connectivity on the go with the Link Pro Backpack. Each ergonomic pack includes four Node modems and a Gold or V-mount battery plate, which will power the system continuously for up to 24 hours. With its lightweight and weather-resistant design, the Link Pro Backpack allows the user to focus on establishing a reliable connection and not on fatigue or damage from the elements.

Power and Connect

A: Link Pro assembly
B: Node assembly 1
C: Node assembly 2
D: Node assembly 3
E: Node assembly 4
F: Battery mount



1. Remove the Nodes' SIM cover plates (**B** through **E**) and insert a SIM card into each slot (see pg. 7). Replace the cover plates and screws.
2. Attach a compatible battery (Gold or V mount) to the battery plate.
3. Turn the front power switch to the **On** position.

Teradek regularly releases new firmware versions to improve performance, add new features, or to fix vulnerabilities. Visit https://www.teradek.com to update your device with the latest firmware.

LINK PRO RADOME

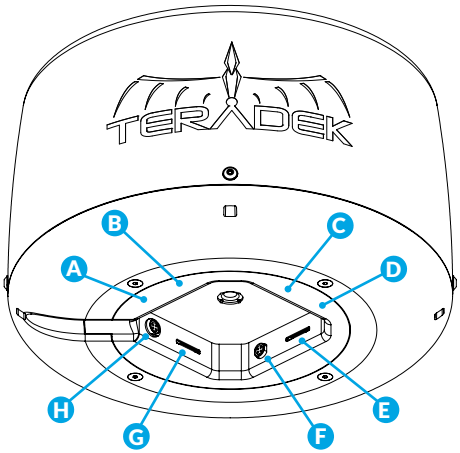
Link Pro Radome contains four 3G/4G/LTE modems and attaches to a standalone Link Pro for optimized antenna placement. Link Pro Radome is designed to endure the harshest of elements and provide a consistent Internet connection anywhere you go, making it perfect for fixed installations and/or vehicular applications.

Assembly and Power

A: SIM card slot 1
B: 4-pin data/power input 1
C: SIM card slot 2
D: 4-pin data/power input 2
E: SIM card slot 3
F: 4-pin data/power input 3
G: SIM card slot 4
H: 4-pin data/power input 4

NOTE: All four Nodes power up and connect to the cellular network automatically when connected to a Link Pro modem.

1. Insert a SIM card into each SIM card slot.
2. Connect all four nodes to Link Pro using 4-pin to 4-pin data/power cables.
3. Power on Link Pro using AC power, or install a battery if Link Pro is equipped with a Gold or V mount battery plate.
4. Connect to one of Link Pro's Wi-Fi networks: **Link-Pro-XXXXX** or **Link-Pro-XXXXX 5G** (**XXXXX** is the last five digits of the device's serial number).



NEED MORE HELP?
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TERADEK SUPPORT STAFF: support@teradek.com or call 888–941–2111 ext2 (Mon–Fri 6am to 6pm PST)

TECHNICAL SPECIFICATIONS

Link Pro

PROTOCOL SUPPORT	
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Bonding	Up to 6 Devices, Ethernet
Remote	Teradek Core
PHYSICAL ATTRIBUTES	
Dimensions	1.69"W x 5.22" D x 4.72 H" [43 x 132.6 x 120 mm]
Weight	19.8 0z. (560 g)
Construction	Milled Aluminum
INTERFACES	
HTTP	Feature-rich web UI for configuration and control
Switches	On/Off and Reset switch
Expansion	2 x USB 3.0 Type-A
Status LEDs	Multiple LEDs for device, wireless, and network statuses
NETWORK	
Ethernet	2 x Gigabit Ethernet RJ45 Ports, Auto MDI-X
Modem	4 x 4-pin locking connectors 2 x USB 3.0 Type-A
Wireless (WiFi)	2x2 2.4GHz 802.11b/g/n, max 20dBm per chain 2x2 5GHz 802.11a/n/ac, max 16dBm per chain Frequency Range 2.412~2.472GHz, 5.180~5.825GHz
Encryption	802.1x, 802,11i, WPA2, WPA and WEP 64/128 TKIP 128bit AES
POWER	
Power Input	2-Pin Circular Locking Connector, 12-20V
Internal Battery Type	Cylindrical lithium ion battery - up to 7Wh
PoE	N/A
Consumption	19W + 3.5W max for connected USB devices
Battery Plates	Integrated Gold or V mount battery plate (optional)
ENVIRONMENTAL	
Temperature	Operating: -10°C to 50°C Storage: -40°C to 90°C
Humidity	Operating: 5% to 95% (non-condensing) Storage: Max. 90%
GENERAL	
Mounting	1/4"-20 threaded hole, 2 x 4-40 threaded holes Additional mounting options available

Node

PHYSICAL ATTRIBUTES	
Dimensions	1.69"W x 5.22" D x 4.72 H" [43 x 132.6 x 120 mm]
Weight	19.8 0z. (560 g)
Construction	Milled Aluminum
NETWORK	
LTE	**US**: LTE FDD Cat 4, Bands 2,4,5,13,17 **EU/Asia**: LTE FDD Cat 4, Bands 1,3,5,7,8,20 **JP**: LTE FDD Cat 4, Bands 1,3,5,8,19 **SA/AUS**: LTE FDD Cat 4, Bands 1,3,5,7,8,28
UMTS	**US**: HSDPA Cat 24, HSUPA Cat 6, Bands 850/1900 **EU/Asia**: HSDPA Cat 24, HSUPA Cat 6, Bands 850/900/1900/2100 **JP**: HSDPA Cat 24, HSUPA Cat 6, Bands 850/900/2100 **SA/AUS**: HSDPA Cat 24, HSUPA Cat 6, Bands 850/900/1900/2100
RF	2x2 MIMO SMA Band 17 (700 MHz), Band 13 (750 MHz) Band 5 (850 MHz) Band 4 (1700 MHz) Band 2 (1900 MHz)
Power Class	Class 3 23dBm LTE mode Class 3 24 dBm for UMTS/HSDPA/HSUPA mode
Data Rate	LTE cat. 4: up to 150 Mb/s DL, 50 Mb/s UL HSDPA cat.14, up to 21 Mb/s DL HSUPA cat.6, up to 5.6 Mb/s UL
SIM	Mini-SIM (2FF)
POWER	
Power Input	4-Pin Connector, 5-28V
Battery	None
Nominal Power Consumption	3.5W max
Interface	2 Status LEDs
ENVIRONMENTAL	
Temperature	Operating: -10°C to 50°C Storage: -40°C to 90°C
Humidity	Operating: 5% to 95% (non-condensing) Storage: Max. 90%
GENERAL	
Mounting	1/4"-20 threaded hole, 2 x 4-40 threaded holes Additional mounting options available

SUPPORT RESOURCES

In addition to this User Guide, there are a number of resources available with information on Link Pro's features and operation. For online information, visit **www.teradek.com**. If you are unable to find what you need online, please contact Teradek's support staff:
E-mail: **support@teradek.com** | Phone: (888) 941-2111 ext. 2 (available M-F 7AM-6PM PST).

DISCLAIMER

This manual is intended for user information only. Every effort has been made to ensure that the contents within are accurate at the time of printing, and that updates are made in a timely manner. Teradek cannot be held responsible for inaccuracies, typographical errors, or out-of-date information contained within this manual.

WARNING

Link Pro contains sensitive electronic components that can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the device is not damaged. Damage due to inappropriate handling is not covered by the warranty. For complete warranty information, please see the warranty card that arrived with the device, or visit **www.teradek.com/pages/warranty-information.**

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help

This device complies with Part 15 of the FCC rules and also with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

EC DECLARATION OF CONFORMITY

CE

Teradek LLC hereby declares that the Link Pro system is in compliance with Directive 1999/5/EC, the Low Voltage Directive (LVD) 2006/95/EC and the Directive of Electromagnetic Compatibility (EMC) 2004/108/EC. The full text of the EC Declaration of Conformity is available at the following Internet address:
https://support.teradek.com/hc/en-us/articles/233429747-EC-Declaration- of-Conformity-for-CE-mark