

# **Network Appliance Platforms**

Hardware Platforms for Network Computing

# LWR-X8460 User Manual

Version: 1.2 Date of Release: 2022-03-16

## **About this Document**

This manual describes the overview of the various functionalities of this product, and the information you need to get it ready for operation. It is intended for those who are:

- responsible for installing, administering and troubleshooting this system or Information Technology professionals.
- assumed to be qualified in the servicing of computer equipment, such as professional system integrators, or service personnel and technicians.

The latest version of this document can be found on Lanner's official website, available either through the product page or through the Lanner Download Center page with a login account and password.

## **Conventions & Icons**

This document utilizes different icons in order to make selected text more transparent and explicable to users.

### **Icon Descriptions**

lcon	Usage
Note or Information	This mark indicates that there is something you should pay special attention to while using the product.
Warning or Important	This mark indicates that there is a caution or warning and it is something that could damage your property or product.

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For troubleshooting the issues with your system, please check the <u>Lanner Q&A</u> page for a diagnostic procedure and troubleshooting steps.

## **Technical Support**

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## **Calling Us**

Phone support is offered to our customers in the United States and Canada. Toll-free customer service number: **+1 855-852-6637** 

## **Documentation Feedback**

Your feedback is valuable to us, as it will help us continue to provide you with more accurate and relevant documentation. To provide any feedback, comments or to report an error, please email to <a href="mailto:contact@lannerinc.com">contact@lannerinc.com</a>, Thank you for your time.

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## **Operating Safety**

- Electrical equipment generates heat. Ambient air temperature may not be adequate to cool equipment to acceptable operating temperatures without adequate circulation. Be sure that the room in which you choose to operate your system has adequate air circulation.
- Ensure that the chassis cover is secure. The chassis design allows cooling air to circulate effectively. An open chassis permits air leaks, which may interrupt and redirect the flow of cooling air from internal components.
- Electrostatic discharge (ESD) can damage equipment and impair electrical circuitry. ESD damage occurs when electronic components are improperly handled and can result in complete or intermittent failures. Be sure to follow ESD-prevention procedures when removing and replacing components to avoid these problems.
- Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. If no wrist strap is available, ground yourself by touching the metal part of the chassis.
- Periodically check the resistance value of the antistatic strap, which should be between 1 and 10 megohms (Mohms).

## Sécurité de fonctionnement

- L'équipement électrique génère de la chaleur. La température ambiante peut ne pas être adéquate pour refroidir l'équipement à une température de fonctionnement acceptable sans circulation adaptée. Vérifiez que votre site propose une circulation d'air adéquate.
- Vérifiez que le couvercle du châssis est bien fixé. La conception du châssis permet à l'air de refroidissement de bien circuler. Un châssis ouvert laisse l'air s'échapper, ce qui peut interrompre et rediriger le flux d'air frais destiné aux composants internes.
- Les décharges électrostatiques (ESD) peuvent endommager l'équipement et gêner les circuits électriques. Des dégâts d'ESD surviennent lorsque des composants électroniques sont mal manipulés et peuvent causer des pannes totales ou intermittentes. Suivez les procédures de prévention d'ESD lors du retrait et du remplacement de composants.
- Portez un bracelet anti-ESD et veillez à ce qu'il soit bien au contact de la peau. Si aucun bracelet n'est disponible, reliez votre corps à la terre en touchant la partie métallique du châssis.
- Vérifiez régulièrement la valeur de résistance du bracelet antistatique, qui doit être comprise entre 1 et 10 mégohms (Mohms).



WARNUNG: Wenn Sie das Gerät zwecks Wartungsarbeiten vom Netz trennen müssen, müssen Sie beide Netzteile abnehmen.

**ATTENTION:** DÉBRANCHER LES TOUT CORDONS D'ALIMENTATION POUR DÉCONNECTER L'UNITÉ DU SECTEUR.

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## **Chapter 1: Product Overview**

LWR-X8460, a 12-stream Wi-Fi 6E (802.11ax) access point network solution, designed for the growing demands of increasingly crowded and dense Wi-Fi environments. With 4x4 MU-MIMO in 2.4 GHz, 5 GHz, and 6 GHz Tri-Band, and comply with IEEE 802.11a/b/g/n/ac/ax standards, the LWR-X8460 offer fast and secure Wi-Fi connectivity.

## **Package Content**

Your package contains the following items:

- ▶ 1x LWR-X8460 Wi-Fi 6E Access Point
- 1x LAN Cable Cat6A
- ▶ 1x AC Power Adapter / Power Cord

## **Ordering Information**

SKU No.	Main Features
LWR-X8460B	High-Capacity Wi-Fi 6E Tri-Band Access Point with Qualcomm Hawkeye2, 2x 10GbE
	(PoE++ PD), 4x 1GbE RJ45 ports, supports wall mount.

## **Optional Accessories**

Model	Description
Wall Mount Kit	Wall Mount Kit

## System Specifications

Form Factor		Fanless Desktop
	Processor	Qualcomm <sup>®</sup> IPQ8076A Hawkeye2 @ 2.2 GHz
Platform	CPU Cores	4
	Security Acceleration	Hardware-based acceleration for IPsec VPN
	Flash NOR	8MB
System Memory	Flash NAND	256MB
	DDR4	1GB
	Standard	IEEE 802.11 a/b/g/n/ac/ax
	Peak PHY Rates	2.4 GHz: 1147 Mbps
		5 GHz: 2401 Mbps
		6 GHz: 4803 Mbps
	Antenna	2.4 GHz: Peak gain 4.25dBi, Internal 4x4, Omnidirectional
		5 GHz: Peak gain 5.4dBi, Internal 4x4, Omnidirectional
		6 GHz: Peak gain 4.8dBi, Internal 4x4, Omnidirectional
	Frequency Bands	2.400 to 2.4835 GHz (ISM)
		5.150 to 5.250 GHz (U-NII-1)
		5.250 to 5.350 GHz (U-NII-2A)
		5.470 to 5.725 GHz (U-NII-2C)
		5.725 to 5.850 GHz (U-NII-3)
Wi-Fi		5.925 to 7.125 GHz (U-NII-5/6/7/8)
VVI-11	Client Capacity	Up to 512 clients per band
	SSID	Multiple SSID: Up to 8 BSSID per band
		Hidden SSID
	Security (Personal)	Enhance Open
		WPA2-PSK
		WPA3-SAE
		WPA/WPA2-PSK mixed mode
		WPA2/WPA3-PSK/SAE mixed mode
	Security (Enterprise)	802.1X Authenticator & Supplicant
		- WPA2-PSK
		- WPA/WPA2-PSK mixed mode
	Advanced	IEEE802.11 k/v/r
		WMM
	Standards	BLE 5.1
Bluetooth	Tx Power	4dBm (class 2)
	Rx Sensitivity	-89dBm
	Antenna	2.4 GHz: Peak gain 3.24dBi, Internal, Omnidirectional

	Consumption	50W (max)
Specifications	Weight	2.1 kg
Mechanical (WxDxH)		220 x 220 x 60 mm (without rubber feet)
Parameters	Humidity (RH)	5% ~ 90% non-condensing
Environmental	Temperature	Operating: 0°C ~ 40°C
		SSH
	Remote Management	HTTP(S)
		Reset to Default
System Management		Firmware Update
	Device Management	Backup / Restore Device Configuration
	Diagnostics	Ping, Traceroute, Nslookup
	Log	System / Kernel Log, Log Levels
	Time	NTP client, Timezone, Local time
		Custom Rules
		Traffic Rules
		Port Forwarding
		Invalid Packet Filter
	Firewall	SYN-Flood Protection
Networking Protocol		Port-Based
	VLAN	802.1Q
		AP Steering
		EasyMesh Wireless Technology Self-Healing
	IP Mesh	IPv4, IPv6
	LED Indicators	Power, Status, 10G, 1G, WLAN, WPS
	Reset	1x Button
	WPS	1x Button
	USB	1x USB2.0, Type A
I/O	Console	1x RJ45 management port
	LAN	4x 1GbE
	LAN	1x 10GbE (1/2.5/5/10GbE)
	WAN	1x 10GbE + IEEE802.3bt (PoE++)

## **Front/Top Panel**







LED	COLOR	ACTION	DESCRIPTION
DOWED	Green	Steady	System On
POWER	OFF	N/A	System Off
	Green	Steady	System Ready
CTATUC	Green	Flash	Firmware update, restart, initialized
STATUS	Red	Steady	System Error
	Note: Status bi-co	lor LED controlle	ed by GPIO
	Green	Steady	Wi-Fi Ready
WLAN	OFF	N/A	No Wi-Fi
100	Green	Steady	Link Successfully
10G	OFF	N/A	No Connection
10	Green	Steady	Link Successfully
1G	OFF	N/A	No Connection
	Green	Steady	5 sec, WPS Linked Successfully
WPS	Green	Flash	WPS Session Negotiation
	OFF	N/A	No Connection

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## **Rear Panel**



NO.	DESCRIPTION			
R1	WPS	1x WPS Button		
R2	Reset	1x Reset Button		
R3	USB	1x USB 2.0 port		
R4	Console port	1x RJ45 Console port		
R5	LAN Ports	4x RJ45 1GbE		
R6	LAN Port	1x 10GbE (1/2.5/5/10GbE)		
R7	WAN Port	1x 10GbE (PoE++ PD)		
R8	Power	1x DC Power Jack		

## **PoE PD Port**

The R7 WAN port supports PoE-in (PoE-PD) functionality, allowing LWR-X8460 access point to be powered from an 802.3bt compliant PoE power supply.

## Wall Mounting (Optional)

The access point can be mounted on a flat surfaced wall. Please take the following into considerations when mounting the system onto the wall.

1. Fix the wall mount brackets onto the bottom of the access point by securing them with the four (4) provided screws.



2. Position the access point's mounting bracket at the desired location on the wall and use a pencil/pen to mark the four mounting holes.



3. Drill four (4) holes, insert wall anchors, then insert screws into the wall anchors, leaving 3/16 inch (0.5 cm) of each screw exposed

4. Align the access point's wall-mounting holes with the screws and mount your access point to the wall.







## **Chapter 2: Connecting the Access Point for Configuration**

Before deploying and configuring the LWR-X8460, the device needs to be properly powered up and connected to the network.

**Step 1:** Power on the LWR-X8460 Access Point. Connect the power adapter (included) to LWR-X8460's 48VDC port and plug the power adapter into a power supply. If powering by PoE, connect the 802.3bt compliant PoE power adapter (sold separately) to LWR-X8460's WAN port and plug the power adapter into a power supply. **Step 2:** Connect the LWR-X8460 LAN Port (10GbE) to a computer/laptop via Ethernet cable.

**Step 3:** Please wait a moment for LWR-X8460 to start up. The wireless access point is ready when the Power LED turns **Green**.

#### Power by DC Power Adapter



**Power by PoE-PD** 



## **Chapter 3: Configuring Your Access Point**

LWR-X8460 Wireless Access Point provides an intuitive Web GUI for easy management. This section provides step-by-step instructions on how to discover the LWR-X8460 and access its Web GUI.

### Access Web UI

The LWR-X8460 embedded Web server responds to HTTPS GET/POST requests. Embedded HTML pages allow users to configure the device through a Web browser such as Microsoft IE, Mozilla Firefox, Google Chrome, and etc.

No password set!	
There is no password set on the Go to password configuration	is router. Please configure a root password to protect the web interface and enable SSH. n
uthorization Re	quired
ease enter your username and	•
Username	admin
	admin
Username Password	admin
	admin
	admin

LWR-X8460 Web GUI Login Page

To access the Web GUI:

- 1. Make sure to device is properly powered up and a laptop/computer is directly connected to the device LAN port via an Ethernet cable.
- 2. Launch the Web browser on the computer and enter the default IP address of the LWR-X8460 (192.168.0.100) in the address field.
- 3. Enter the Username and password to access the Web Configuration Menu. The default username is "admin," and the password is "admin."

#### Change the Administrator's Password

Change the administrator's password for security reasons

- 1. Click on the **System** icon on the top menu, and select **Administration** from the pull-down menu.
- 2. Enter the New Password and retype it in the Confirmation field

LWR-X8460 Status -	System - Network - Statistics - Logout
No password set!	
There is no password set on t Go to password configurati	his router. Please configure a root password to protect the web interface and enable SSH. on
Router Passwore	d
Changes the administrator pass	vord for accessing the device
Password	3
Confirmation	<i>a</i>
SSH Access	
	ell access and an integrated SCP server
Dropbear Instance	
	Delete
Interface	O lan: 2 2 2 2 2 2 表 未 未
	O Ian_alias: 🖉
	unspecified
	Listen only on the given interface or, if unspecified, on all
Port	22
	Specifies the listening port of this Dropbear instance
Password authentication	☑ ☑ Allow <u>SSH</u> password authentication
Allow root logins with password	Allow the root user to login with password
Gateway ports	Allow remote hosts to connect to local SSH forwarded ports

## Save and Apply Changes

After configuring or changing any options on the Web GUI pages, click **"Save & Apply"** on the bottom of the page to apply changes.

Save & Apply	Save	Reset

## Navigating the Web GUI Management Interface

LWR-X8460 Wireless Access Point has a Web GUI for configuration and management. This section will guide users through Web GUI's detailed settings. The following table shows all the pull-down function tabs of the Web GUI.

<u>Status</u>	<u>System</u>	<u>Network</u>	<u>Statistics</u>
<u>Overview</u>	<u>System</u>	Interfaces	<u>Graphs</u>
<b>Firewall</b>	<u>Administration</u>	<u>Wireless</u>	<u>Setup</u>
<u>Routes</u>	<u>Backup / Flash Firmware</u>	DHCP and DNS	
System Log	<u>Reboot</u>	Hostnames	
Kernel Log		Static Routes	
<u>Processes</u>		<b>Diagnostics</b>	
Realtime Graphs		<u>Firewall</u>	

## Status

LWR-X8460	Status -	System +	Network +	Statistics +	Logout	AUTO REFRESH ON

#### **Status Overview**

Status Overview provides an overview of the LWR-W8460, with system information, firmware version, memory status, network status, and wireless status.

LWR-X8460 Status + S	ystem + Network + Statistics + Logout AUTO REFRESH ON
No password set!	
There is no password set on this ro Go to password configuration	uter. Please configure a root password to protect the web interface and enable SSH.
Status	
System	
Hostname	LWR-X8460
Model	LWR-X8460
Firmware Version	V 1.0.1-rc.21.930 Build 211005_1728 / LuCl lwr-x8460-1.0.x-rc.21.930 branch (git-21.274.38363-b3fb0f5)
Kernel Version	4.4.60
Local Time	Tue Oct 5 10:36:33 2021
Uptime	1h 7m 30s
Load Average	0.00, 0.00, 0.00
Memory	
Total Available	519576 kB / 831884 kB (62%)
Free	512498 kB / 831884 kB (61%)
Buffered	7080 kB / 831884 kB (0%)
Network	
IPv4 WAN Status	

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#### **Firewall Status**

Displays current firewall status, with actions to reset Counters and restart Firewall.

LWR-X8460 States - System - Network - Statistics - Lagout	LWR-X8460 Status - System - Network - Statistics - Logout
No password set! There is no parsword of the film maker. Plants configure a test parsword for protect the web interfaces and and Go to parsword configuration	No password set! there is no password set on this router. Please configure a not password to protect the web interface and enable SSH. Go to password configuration
Firewall Status	Firewall Status Prof Freenal Prof Freenal
Actions State Contes Results Table: Filter	Actions   Reset Counters  Reset Freewall  Table: Filter
Chan MPUT (Pulicy: ACCOPT, Packets: 9, Traffic: 5.00 (9)	Chain BNPUT (Policy: ACCEPT, Packets: 0, Traffic: 0.00 (0)
Rule Pits Todic Target Pits Flags in Cut Source Decitation 8	Optime Pute Prits. Traffic Target Pritt. Flags in Out Source Destination Options
1. HER 12548 Hopps, put at 1. 1. 02238 02248	1 0 0000 delegate_most at - 1 00 00 -
Chain FORMARD (Policy: DROP, Packets: 9, Traffic: 6.01 II)	Chain FORMAD (Policy: DROP, Packets: 8, Traffic: 0.00 8)
Pain Pris. Traffic Tarpet Prist Paigs In Cod Boards Destination #	Options Pute Pets Traffic Target Prot. Flags in Out Source Destination Options
1 95601 11.26 seegels, lever at - 1 - 0.0.558 0.0.5588 900	1 21 1.91 delegate_bread all - * 20 :00 - KB
2 9 8808 ACCOPY 46 - * * 85589 85589	PrivriD(CV males - physike-in-triffpell Chain OUTPUT (Policy: ACCEPT, Packets: 2), Traffic: 1.98 K8)
Chain OUTPUT (Policy: ACCEPT, Pachetic 0, Traffic: 6.01 (b)	Rule Pits. Traffic Target Prot. Flags in Out Source Destination Options
Rue Pris Toric Tagel Pris Page in Cal Since Decimited	
1 228 1.3256 means, sets at - 1 - 0.0000 0.0000	Chain delegate forward förferences: 1

### Routes

Routes sections displays the rules that are currently active on the LWR-X8460.

No password	set!			
There is no passw Go to password of		ure a root password to protect the web interface	and enable SSH.	
Routes				
he following rules a	re currently active on this system.			
RP				
IPv4-Address		MAC-Address	Interface	
172.21.1.55		00:2b:67:f7:48:d7	br-lan	
172.21.1.254		04:d5:90:50:49:22	br-lan	
Active IPv4-R	outes			
Network	Target	IPv4-Gateway	Metric	Table
lan	0.0.0/0	172.21.1.254	0	main
lan	172.21.1.0/24		0	main
lan	172.21.1.0/24		0	main
lan	172.21.1.0/24		0	main
lan Active <u>IPv6</u> -Re			0	main
		Source	0 Metric	main
Active <u>IPv6</u> -Re	putes	Source		
Active <u>IPv6</u> -R( Network	Dutes Target	Source	Metric	Table
Active <u>IPv6</u> -R( Network	Dutes Target fd45:1cb0:2e70::/84	Source	Metrio 1024	Table
Active <u>IPv6</u> -R( Network Ian	Target           fd45.1cb0.2e70::/84           ff00::/8	Source	Metrio 1024 256	Table main local

## System Log

Allows users to retrieve logs generated for troubleshoot purposes.

No password set!	
There is no password set on this routs Go to password configuration	c Please configure a root password to protect the web interface and enable SSH.
system Log	
	53.451807] viter. (1275); 197] Num PHY + 2
	63,456241] witten: [122511.T0F] FW Build Version (Ext.) > 0
	63.400400) witer: [1275:::19] HOL Version: Magn/Version Mino/Version = 0.0
	\$3.405000) wite: [12751:TW] Preferred HW Mode = 1 Num Hadiot = 2
	63.472768 wilan [1275 t T#] int_dealet_add_ffar_modes_he_mode_id = 1 phy_id = 0 wheles modes = 1079001
	53.478908[ wilan: [12751:TW] init_steinit_add11ax_modes. hw_mode_ad = 1 phy_id = 1 wiretess modes = 680685c
	53.409497) vilan (1275.1 T#) ind_demit_alloc_pdevs: COP PDEV ATTACH soccess
	53.499348( urlan: (1275):1197 (int_delinit_alloc_pdws: CDP PDEV ATTACH soccess 53.508167) urlan: (1275):1197 (int_delinit_get_blat, num_ama_vaps: num_radios: 2
	53.5404/07 waan (1275); TW) int, deint, get, talar num, eine vapir, man, nan, nan, op crit 0
	53.51.0450) witer (1275.117) int_denit_get_line_nem_wite_vept_mini_mea_vept_time_vept_01.0 53.521004) witer (1275.117) int_denit_get_line_nem_vdevt_fir_soc.num_vdevt_34
	53.520 VVM, Haler, (1275); TVF) mil, permit, ger Linar, Nam, Varve, Lin, Joseve, Lin, Haler, Lina 53.52002); vitan (1275); TVF) mil, denist, ger, tinar num, ema, vapo, num, radios, 2
	SA SAME () want (1275) TW) into denit, get, bital yaan wita yapa man yapa yap cet. 0
	53 544092] ware [12751 T#] int_deint_get_tital_rum_view_file_view_view_rum_view_rum_view_view_view_view_view_view_view_view
	53.55 HE21 ware (1275) TH7 (int, dent, get, bital, num, enay vapo, num, rokoo, 2
	53.559634; wier: (1275 t TP) mt, deint, get, bital, num, ena, vep, ema, max, eap, cet. 0
	53.557103 wint (1275117F) int deint get tital num vdevt for sic num vdevt 34
	53 574225 wint (1275 119) int_deint_pat_html num_wina_vapa_num_jados 1
	53.552433 wan (1275) TP() nt deint get tite nun eine veps mit net vep ort 0
	63 500104 wan (1275::T#) mt deint get talat num views the acc num views 17
	63 597838 ware (12751:ANY) rel. dwint update pdev tat info pdev at 0 ems. Number3712:000
	\$1.607/2031 wiles [127511ANY] est, dwird, update, pdev tat, into: Pdev = 0 Number of poets = \$25 vdevs = \$7
	51 814148 viter [10751176] int. dent. update pdev tat inter CCP PDEV INT second
	53.823957[ waiet [12751.4897] ind, deniet, update, pdev tat, india pdev at 1 arts, handle bid13x050
	53.633322] wate: [12751.ANV] init, denot, update, pday, bit, initi. Pday = 1 Number of poets = 529 vdays = 17
	53.640260 water (1275.1.737) will dwinit update pow- ligt info COP PDEV INT success
	53.750212) want [12751.ANV] copy fw and version for copy fw and version for INT_CMD version: 1.0.0x5H14251.0x4x4d
	\$3.951537] wiler (12751/AW) wady extract int status by ready extract int status by 0
	63.951958 ware [12751.AWY] do peer map which will do peer map attach will may peers 1000 mar ant index 4112
1 Dec 10 08 51 51 2021 tem en temel (	
	53 956212] witer: [15151.ANV] al. ath. connect. Hz: WMI is musty
	54 013513] ware (15151/ANV) alth, get, radia, index: Error: Could not match the device name : within
	54.013545) ware (1515 E NSS) bree willit adex b3ac0500 rade, drum 28 scheme, st 5 radio pronty 1
	54 020005) want (1515 E.TIF) target, if, ins, hash, config. pdex with id 0 is NULL.
	54.034011] when (15151 AVV) alls, get, radio, index. Error: Could not match the device name : withted
il Dec 10 08 St 51 2021 kem en kemel (	54.036408) wier: (1515 E.NSIS (ros will), pdev 5366560 radio, (hum 29 scheme, jit 1 radio, provily 0
1 Dec 10 08.51.51 2021 kem at kamel (	54.052454) when (1515 E-TIP) (arget (F, Iro_hash_coolig_ pdev with id 1 is NULL
il Disc 10-08.51.51 2021 kem art kemel (	54.057368[wtet: [15151ANY] al_abi_poc_attach: connect HTC
1 Dec 10-08 51 51 2021 kern att kernel (	54.054264[wtat: [15151.04V9]st_ath_poc_attach: hypanisms: 8
in Pase 42,62 63 63 53 2023 heart and harmed 4	54.070213) ware (1515.1.MSC5) gca, mice, module, wit

## Kernel Log

Allows users to retrieve logs generated for troubleshoot purposes.

There is no paraword set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration	
Kernel Log	
1         0.000000         Linux on physical CPU 0.0           0.0000000         Linux on physical CPU 0.0         Linux PPUBLIC           0.0000000         Linux PPUBLIC         Linux PPUBLIC           0.00000000         Linux PPUBLIC         Linux PPUBLIC           0.00000000         Linux PPUBLIC         Linux PPUBLIC           0.00000000000000000000000000000000000	swatto-1 coloured_a

#### Processes

Processes section provides an overview on current running system processes and their status.

		ord set on this router. Please configure a root pass configuration	word to protect the we	eb interface an	d enable SSH.		
	passiona	in a second s					
roc	esses						
s list	gives an ove	view over currently running system processes and	I their status.				
ID	Owner	Command	CPU usage (%)	Memory usage (%)	Hang Up	Terminate	Kill
			(74)				
			(74)				
	root	/sbin/prood	0%	0%	🗳 Hang Up	💌 Terminate	🙆 Kill
			0%				
	root	/sbin/prood [kthreadd]		0%	Hang Up Hang Up	X Terminate	S Kill

## **Realtime Graphs**

Displays real-time graphs including real-time load, real-time traffic, real-time wireless, real-time active network connections.

o password set! we in a password set on this moder. Please configure a root password to protect the web interface and on to password configuration and Traffic Wireless Connections altime Load	enable SSH.	There is no password set on this router. Please co Go to password configuration Load Traffic Wireless Connections	nfigure a root password to protect the web interface an	nd enable SSH.
at Traffic Winess Connections		And Tark Marker America		
altime Load		Load frame wireless Connections		
		Realtime Traffic		
	Im		eth1 eth2 eth3 eth4 eth5	
		Im	28	Im
06	A			
8		0 khitis (0 kBis)		
		0 khitis (0 kBis)		
		0.15hith (0.12hit)		
	(3 minute window, 3 second interval)			
1 Minute Load:         0.05         Average:         0.06           5 Minute Load:         0.09         Average:         0.09	Peak: 0.08			(3 minute window, 3 second int
S Minute Load:         0.09         Average:         0.09           15 Minute Load:         0.05         Average:         0.05	Peak: 0.10	Inbound: 0 kbib/s (0 kB/s)	Average: 0 kbit/s (0 kB/s)	Peak: 0 kbit/s (0 kB/s)
		Outbound: 0 kbit/s (0 kB/s)	Average: 0 kbib/s (0 kBib)	Peak: 0 kbit/s (0 kB/s)
red by LuCl Iwr-x8460-1.0.x-rc 21.930 branch (git-21.274.38363-b3tb0f5) / OpenWit Chaos Calmer 15.05	5.1 hrr-x8460-1.0.0-rc.21.930+r49254	(4 40-9)	(a week)	fa weekh
a password sett		LWR-X8460 Status - System - Net	on - aanaa - aana	AUTO REFRE
ere is no password set on this router. Please configure a root password to protect the web interface and en	udo SSH	No password set!	nfigure a root password to protect the web interface a	
Io password set! where ice parameter set on the matter. Please contigues a next parameter for product the web interfaces and ne to parameter configuration	uzble SSH	No password set! There is no password set on this router. Please or	nfigure a root password to protect the web interface a	
have is an expression of a life index. Places cardigue a next parential to protect the web interface and next on to parameter configuration	valle SSH	No password set! There is no password set on this router Please co So to prevenent configuration Load Traffic Wheteo Connectors	nfigure a root password to protect the web interface a	
ere is no paroused set on this ranke. Please configure a neet paroword to protect the web interface and on to possword configuration	usle SDH	No password set! There is no persented set on this router. Please or Go to paceword configuration	nigure a root password to protect the web interface a	
enes has presented out in the node. Places cardyon a not password by pretect the web later and one to password cardformation and Traffic. Western Carnecters altime Wireless bit and a shit and a	10	No password set! Takes in to password set on this router Please or Go to password configuration Load Traffic Windows Connections Realtime Connections	nigure a root password to protect the web interface a	
nes exe providente et al metricules and providente to prefect the web interface and re- to possered configuration		No password set! Takes in to password set on this router Please or Go to password configuration Load Traffic Windows Connections Realtime Connections This page glues an eventing over currently active ref	nigure a root password to protect the web interface a	
nes exe providente et al metricules and providente to prefect the web interface and re- to possered configuration		No password set! Takes in to password set in this router. Please or Go to persword configuration Lead Traffic Windows Connections Realitime Connections This page glues an eventieer over currently active net Active Connections	nigure a root password to protect the web interface a	and analtic SSI (
nes explorationed value file file file file file file file fil		No password set! Takes in to password set on this router Please or Go to password configuration Load Traffic Windows Connections Realtime Connections This page globs an eventive over currently active ref Active Connections	nigure a root password to protect the web interface a	and analtic SSI (
are to parameter of the tests of Plane certifying a net parameter to particule with Marian and res to parameter configuration ad Traffic Writeless a define define define the set of the		No password set! Takes in to password set on this router Please or Go to password configuration Load Traffic Windows Connections Realtime Connections This page globs an eventive over currently active ref Active Connections	nigure a root password to protect the web interface a	and analtic SSI (
In the proposed of an Abronke Abrone ordigine a next presented to protect the web later law and ne to possessed configuration. at Tartie Western Connection attime Wireless attime Abrone Abrone Abrone Abrone Abrone Abrone attime Abrone Abrone Abrone Abrone Abrone Abrone Abrone Abrone attime Abrone		No password set! There is no password set on this router Please or Go to password configuration Lead Trafic Whates Connections Relatine Connections This page gloss as eventing over connectly other net Active Connections 33 33 33 33 33 33	nigure a root password to protect the web interface a	and analtic SSI (
In the prevent of all of the rate of Base or Rights a next prevent is preter the web istartics and on to password configuration a Traffic Whether Connections altime Wireless and altime Connections altime Connections al		No password set! Takes in to password set in this router. Please or Go to persword configuration Lead Traffic Window Connections Realtime Connections This page glues an eventier over currently active net Active Connections	nigure a root password to protect the web interface a	and analtic SSI (
In the prevent of all of the rate of Base or Rights a net prevent is preter the web istartics and on to password configuration Trafic Whether Connections altime Wireless and altime Section 200 and altime Section 200 for	In	No password set! There is no password set on this router Please or Go to password configuration Lead Trafic Whates Connections Relatine Connections This page gloss as eventing over connectly other net Active Connections 33 33 33 33 33 33	nigure a root password to protect the web interface a	and analtic SSI (
In the prevent of at a the rate of Base ordigae a not prevent is protect the web islarizes and on to password configuration. Table: Whether Connection altime Wireless is a 2n fin f	la Gimada watelor, 2 Jonani Minado	No password set! There is no password set! There is no password certifyuardien. Lead Traffic Wheles Connections Realtime Connections The grap gloss an context or currently active net Active Connections	Infigure a root password to pottect the web interface a work connectors.	and anable 5091
In the spanned of the fields of these orthyses and parenear by predict the web identical and ref to parameter configuration. Tartic Wetters Connections altime Wireless 0 whit with a with a set 0 whit with a with a set 10 m m m m m m m m m m m m m m m m m m m	In G marke window 3 assored bilance Parke - 46 dbm (SAR 9 dbm)	No password set!       There is no password set!       Load     Traffic       Whereas     Connections   The page gives an exercise over currently active net Active Connections       Str       38       39       30         31         32         33         34         35         36         37         38         39         30         31         32         33         34         35         36         37         38         39         30         31         32         33         34         35         36         37         38         39         30         31         32	Infigure a root password to potted the web interface a work connectors.	ond mobile 5091
ne ne provide out of the nucle of gives a net prevent to protect the web identics and one opposed of configuration. altime Wreters Connection altime Wreters Connection altime Provide and and a second se	la Gimada windor, 2 Jonani Hinnel	No password set!       There is no password set!       Load     Traffic       Whereas     Connections         Active Connections         200       30         31         32         33         34         1000     43	Infigure a root password to pottect the web interfece a work connections.	nof mobile 5001
in the personnel of an of this near Charac ordiges a next personal to protect the web interface and one to possessive of configuration	In G marke window 3 assored bilance Parke - 46 dbm (SAR 9 dbm)	No password set!       There is no password set!       Load     Traffic       Whereas     Connections   The page gives an exercise over currently active net Active Connections       Str       38       39       30         31         32         33         34         35         36         37         38         39         30         31         32         33         34         35         36         37         38         39         30         31         32         33         34         35         36         37         38         39         30         31         32	Infigure a root password to potted the web interface a work connectors.	ond mobile 5091
In the presented will an Bite network States cardigane a next presented by protect the web istantices and re- to presented cardigaration	la G enside visible, 2 asserte stando Parke - 45 dim (SAR 0 dim) Parke - 45 dim	No password set! There is no password set! There is no password set! Load Traffs Whates Connections  Realtime Connections  Active Connections	Infigure a root password to pottect the web interfece a work connections.	nof mobile 5001
mere the presented net in the network Planes cardingues a net presented to pretect the web identical and net bit presented cardinguestion      ad Tartis: Window Carrendow      attime Wineless      attime wi	la G enside visible, 2 asserte stando Parke - 45 dim (SAR 0 dim) Parke - 45 dim	No password set! There is no password set! There is no password set! Load Traffs Whates Connections  Realtime Connections  Active Connections	nfgure a root password to potted the web interfece a north connectors.           Dri           Dri           Average:         42           Average:         2           Average:         2           Destination         2	of weble 5091

System						
LWR-X8460	Status +	System +	Network +	Statistics +	Logout	AUTO REFRESH ON

## System

System allows users to configure the basic aspects of the device, like its hostname or the time zone.

LWR-X8460 Status -	System - Network - Statistics - Logout	AUTO REFRESH ON	LWR-X8460 Status -	System - Network - Statistics - Logout AUTO REFRESH DM
No password set! There is no password set on th Go to password configuration	No router. Please configure a root password to protect the web interface and enable SSH. on		No password set! There is no password set on th Go to password configuration	his router. These configure a root password to protect the web interface and enable SSH, as
System Here you can configure the basic	aspects of your device like its hostname or the timezone.		System Here you can configure the basic	aspects of your device like its hostname or the timezone.
System Properties	g Language and Style		System Properties	g Language and Dyle
Local Time	Tue Oct 5 10:45:01 2021 Sync with browser		System log buffer size	64 @ k@
Hostname	LMR-X8460		External system log server	0.00.0
Timezone	итс 🗸		External system log server port	814
			External system log server protocol	UDP v
Time Synchronization			Write system log to file	/tmp/system.log
Enable NTP client	8		Log output level	Cebug 🗸
Provide NTP server			Cron Log Level	Normal 🗸
NTP server candidates	0. openwrt. pool.ntp.org			
	1.openwrt.pool.ntp.org			
	2. operwrt. pool into org		Time Synchronization	
	3. openwrt pool ntp. org		Enable NTP client	
			Provide NTP server	
	Save & Apply 1	Save Reset	NTP server candidates	0 openwrt.pool.nip.org
				1.openwrt.pool.ntp.org

Features	Description
General Settings	Local time, Hostname, Timezone
Logging	System Log Buffer size, External system log server, External system log server port, External system log server protocol, Write system log to file, Log output level, Cron log level
Language and Style	Language, Design
Time Synchronization	Enable/Disable NTP client, Provide NTP server, NTP server candidates

## Administration

Users can change the router password and SSH access on this page. Dropbear instance offers SSH network shell access and an integrated SCP server.

No password set! There is no password set on the Go to password configuration of the password co	nis router. Please configure a root password to protect the web interface and enable SSH. m
Router Password	
onanges are administrator passi	and the decessing the decree
Password	<i>#</i>
Confirmation	<i>a</i>
00114	
SSH Access Dropbear offers SSH network she	all access and an integrated SCP server
Dropbear Instance	- 40000
Dropbear instance	
	Delete
Interface	
	unspecified
	Listen only on the given interface or, if unspecified, on all
Port	Specifies the listening port of this Dropbear instance
Password authentication	2 O Allow SSH password authentication
Allow root logins with	Allow the root user to login with password
password	
Gateway ports	Allow remote hosts to connect to local SSH forwarded ports
	Description

## Backup / Flash Firmware

LWR-X8460 Status - System - Network - Statistics - Logout	LWR-X8460 Status System - Network - Statistics - Lagout
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration	No password set: There is no parameter set on This maker. Please configure a not parameter to protect the web interface and enable SDH. Ge to parameter configuration Backup file list
Flash operations	Actions Configuration
Actons Configuration	This is a lot of shall pitk patients for matching flees and directories to include during epupprobe. Modified flees in inclooning and certain other configurations are automatically preserved.
Backup / Restore Cick "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images). Download backup:	MI This file contains files and diversities that should mit to preserved during an upgrade. If includenting contains the should be a should be should be should be a should be a should be a should be a should
Restore backup: 選擇懂案 未想揮任何推案 📴 Upload archive	
Flash new firmware image	
Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires a compatible firmware image).	
Keep settings:	
Image: 選擇理義 未態準任何確成 🦉 Flash Image	

Feature	Description
Flash Operation - Action	s
Backup / Restore	Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset." To restore configuration files, you can upload a previously generated backup archive here.
Flash New Firmware Image	Upload a sysupgrade-compatible image to replace the running firmware. Check "Keep settings" to retain the current configuration.

This is a list of shell glob patterns for matching files and directories to include during system upgrade. Modified files in /etc/config/ and certain other configurations are automatically preserved.

### Reboot

Reboots the operating system of your device.

LWR-X8460 Status + System + Network + Statistics + Logout			
No password set!			
There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration			
Reboot			
Reboots the operating system of your device			
Perform reboot			

## Network

LWR-X8460	Status <del>+</del>	System +	Network	Statistics - Logout	AUTO REFRESH ON

### Interfaces

Interface overview displays the current active networks, status, and users can take actions to add new interfaces, connect, stop, edit, delete.

LWR-X8460 Status - System	n + Network + Statistics + Logout		AUTO REFRESH ON		
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration					
LAN_ALIAS LAN					
Interfaces					
Network	Status	Actions			
LAN_ALIAS	MAC-Address: 00:00:00:00:00:00 RX: 0 B (0 Pkts.) TX: 0 B (0 Pkts.)	🥩 Connect 🥥 Stop 🛃 Edit	Delete		
LAN	Uptime: 1h 23m 1s MAC-Address: 00:90:0B:AA:BB:CC RX: 2.32 MB (19854 Pkts.) TX: 3.00 MB (9078 Pkts.) IPv4: 172.21.1.38/24 IPv6: fd45:1cb0:2e70::1/80	Stop Zedit	N Delete		
Add new interface					
Global network options					
IPv6 ULA-Prefix fd45:10	bb0:2e70::/48				

#### Wireless

Wireless overview displays all the current active wireless connections and users can scan, add, disable, edit or remove.

LWR-X8	3460 Status + System + Network + Statistics + Logout			AUTO REFRESH ON			
There is i	No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration						
	ster "LWR-X8460-24G" wifi2: Master "LWR-X8460-6G" wifi0: Master "LWR-X8460-5G						
	Qualcomm IPQ807x 802.11anacax (wifi0) Channel: 149 (5.745 GHz)   Bitrate: 2401 Mbit/s		Scan	Add			
	SSID: LWR-X8460-5G   Mode: Master BSSID: 00:03:7F:12:DD:1B   Encryption: None	Oisable	dit Edit	Remove			
	Qualcomm IPQ807x 802.11bgnax (wifi1) Channel: 1 (2.412 GHz)   Bitrate: 1147 Mbit/s		🖸 Scan	Add			
	SSID: LWR-X8480-24G   Mode: Master           BSSID: 00:03:7F:12:09:17   Encryption: None	🕲 Disable	Z Edit	Remove			

## **DHCP and DNS**

Dnsmasq is a combined DHCP-Server and DNS-Forwarder for NAT firewalls.

LWR-X8460 Status +	System - Network - Statistics - Logout
No password set! There is no password set on the Go to password configuration	his router. Please configure a root password to protect the web interface and enable SSH. m
DHCP and DNS Dnsmasq is a combined <u>DHCP-S</u> Server Settings	Server and DNS-Forwarder for NAT firewalls
General Settings Resolv	and Hosts Files TFTP Settings Advanced Settings
Domain required	On't forward DNS-Requests without DNS-Name
Authoritative Local server	O This is the only <u>DHCP</u> in the local network     //an/     O Local domain specification. Names matching this domain are never forwarded and are resolved from DHCP or hosts files     only
Local domain	Ian C Local domain suffix appended to DHCP names and hosts file entries
Log queries	White received DNS requests to syslog
DNS forwardings	/example.org/10.1.2.3       Ist of DNS servers to forward requests to
Rebind protection	Discard upstream RFC1918 responses
Allow localhost	Allow upstream responses in the 127.0.0.0/8 range, e.g. for RBL services
Domain whitelist	ihost.netflix.com
Local Service Only	Iimit DNS service to subnets interfaces on which we are serving DNS.
Non-wildcard	Bind only to specific interfaces rather than wildcard address.
Functions	Description
	forward DNS-Requests, local network authorization, local domain specifications, lo
eneral Settings	domain suffix, log querie settings, rebind protection, allow localhost, domain whitel
	local service only, non-wildcard and add static leases.
lv and Hosts Files	Read, Ignore, Add Hosts files
<b>FFTP Settings</b>	Enable/disable TFTP server
vanced Settings	suppress logging, allocate IP sequentially, filter private, filter useless, localize queri

expand hosts, cache negative replies, add server file

#### Hostnames

Users can add host entries in this section.

LWR-X8460 Status + System + Network + Statistics + Logout
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration
Hostnames
Host entries
Hostname IP address
This section contains no values yet
Add

#### **Static Routes - Routes**

Routes specify over which interface and gateway a certain host or network can be reached. Users can add new Static Routes.

LWR-X8460	) Status - System - I	Vetwork + Statistics +	Logout			
There is no pas	No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration					
Routes Routes specify ov	Routes Routes specify over which interface and gateway a certain host or network can be reached.					
Static IPv4 F	Routes					
Interface	Target	IPv4-Netmask	IPv4-Gateway	Metric	мти	Route type
	Host-IP or Network	if target is a network				
This section con	tains no values yet					
Add						
Static IPv6 F	Routes					
Interface	Target		IPv6-Gateway	Metric	мти	Route type
IPv6-Address or Network (CIDR)						
This section contains no values yet						
Add						

## **Diagnostics – Network Utilities**

Users can use diagnostic tools including Ping utility, Traceroute tool, Nslookup in this section.

LWR-X8460 Status - System -	Network - Statistics - Logout	
No password set! There is no password set on this router. Plea Go to password configuration	se configure a root password to protect the web interfa	ce and enable SSH.
Diagnostics Network Utilities		
openwrt.org	openwrt.org	openwrt.org
IPv4 🗸 🚺 Ping	Traceroute	Slookup
	Install iputils-traceroute8 for IPv8 traceroute	

Functions	Description
Ping	Use ping utility to check Internet connectivity for troubleshooting
Traceroute	Use traceroute utility to display the route (path) and measuring transit delays of packets across an Internet Protocol (IP) network.
Nslookup	Use nslookup to query the Domain Name System (DNS) to obtain domain name or IP address mapping, or other DNS records.

## Firewall

Create Firewall custom rules, traffic rules, port forwards and general settings.

LWR-X8460 Status + System + Network + Statistics + Logout	LWR-X8460 Status - System - Network - Statistics - Logout
No password set! There is no password set on this mount. Please configure a nost password to protect the web interface and enable SSH. Go to password configuration	No password set! There is no password set on this nutler. Flease configure a net password to protect the web interface and enable SSH. On to password configurations
General Settings Port Forwards Traffic Rules Costorn Rules	General Setings Port Forwards Traffic Rules Custom Rules
Firewall - Zone Settings The freesil oreates zones over your network interfaces to control network traffic flow. General Settings	Firewall - Port Forwards Port towards allows remote computers on the internet to connect to a specific computer or service within the private LAV. Port Forwards
Enable SYN-frood protection	Name Nation Forward to Enable Sort
Drop invelid posiets  input accept  V	
Output accept V	
Forward reject V	
Zones	
Zone⇒Forwardings Input Output Forward Masquerading MSS clamping	
Image: Them:         Them:	
www. (empty) = (REACT niject V accept V niject V d d Edt R Delete	
10 Add	

#### LWR-X8460 User Manual

LWR-X	1460 Status - System - Network - Statistics - Logos	¢.					LWR-X8460 Status + System - Nerwork - Statesks - Logout
There is	sword set! to password set on this muter. Please configure a root password to pro seword configuration	ect the web interface ar	id enable S	ISH.			No password set! There is no password at on this muter. Phase configure a root password to protect the web interface and enable 50H Go to password configuration
General	Settings Port Forwards Truffic Rules Custom Rules						Oenersi Settings Port Forwards Traffic Rules Custom Rules
	all - Traffic Rules durine policies for packets traveling between different zones, for examp tules	le to reject traffic betwe	en certain h	rasts or to oper	n WAN ports	on the router,	Firewall - Custom Rules Custom rules allowyou to execute anthry states commands which are not otherwise covered by the timewall transvorii. The commands are executed after each reveal weaker, right after the default roleval transverse been transled.
Name	Motch	Action	Enable	Sort			If The the E-many-model as clinit control. # Plut your continue plottless makes being, flow and the be-included with each threads (the Jacan.
Allow- DHCP- Renew	(Pv4-usp From any host in wan To any noutre (P at part 66 on the device	Accept Input	8	••	id Edt	HI Delete	# Informal uch timevisil chains and fluctured and reconciled on reload, so # put custom nuture into the root chains e.gINPUT OF FORMARD or into the # replaced user chains, e.g. input_ven_nute or porticuting_tem_view
Allow- Ping	IPs4-long with type exholenguest From any host in war To any notate (P on the device	Accept input	5	• •	📓 Eat	E Delete	
Allow- IGMP	IPu4-tigrap Finder data host in war To any router IP on this device	Accept Hout	8		id Eat	* Detets	
Alkow- DHCPv6	IPv6-udp Fism IP range Av82 /10 in vari with source port 547 To IP range Av82 /10 at port 546 on this divisor	Accept input	8		ill Est	<ul> <li>Deleta</li> </ul>	
Allow- MLD	IPv0-iong with types (300, 1310, 1320, 1430) From IP range (s90,/10 in wan To any muter IP on this device	Accept Input	8	• •	🗷 Eat	Deloto	Restal Frend
Allow- ICMPv5- Input	IPG-long with types entro-respect, enho-resp, declaration-invescribile, parent to do, the e-oceanic, ban header, unnown header spec, route- entrolation, respect autobation, route-astretitement, resplaces, advectorment From to note in unit. To any router 10 ao stu device.	Accept input and limit to 1000 pits, per second	8	•••	Edt.	E Deleta	Pewared by LuCi her-x5460-10 x +c 21 520 branch (g8-21 274 38363-60805) / OpenNitt Chaos Calmer 15 65 1 her-s6469-1.0 -kc 21 520+46254
	IP-64-cmp with types echo-mycest, echo-ecyt, desired on Agent packed too by, the eccenter, backheader, unknown-header gae Prom any host in wer To any host in wer	Accept forward and limit to 1000 pids, per second	8	••	Edit	Delete	

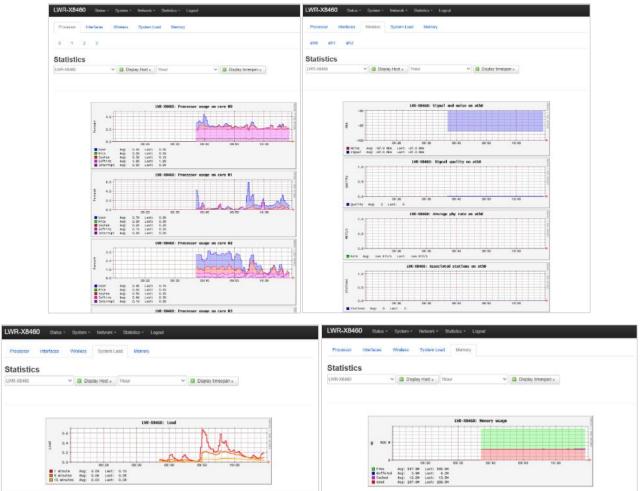
Features	Description
General Settings	The firewall creates zones over your network interfaces to control network traffic flow.
Port Forwards	Port Forwarding allows remote computers on the internet to connect to a specific computer or service within the private LAN.
Traffic Rules	Traffic rules define policies for packets traveling between different zones, for example to reject traffic between certain hosts or to open WAN ports on the router.
Custom Rules	Custom rules allow you to execute arbitrary iptables commands which are not otherwise covered by the firewall framework. The commands are executed after each firewall restart, right after the default rule set has been loaded.

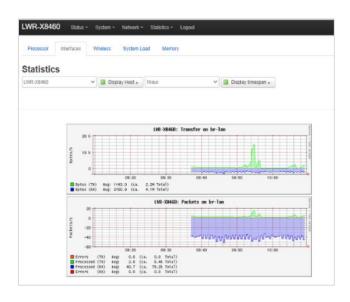
## Statistics

LWR-X8460 Status - System - Network - Statistics - Logout AUTO REFRESH 0	LWR-X8460 Status - System	Network - Statistic
--	---------------------------	---------------------

### **Statistics Graphs**

Display statistic graphs on processor usage, transfer, packets, signal and noise, quality, system load, and memory usage. Users can filter the graphs by display host and timespan.





### Setup

### **Collectd Settings**

Collectd is a small daemon for collecting data from various sources through different plugins. On this page you can change general settings for the collectd daemon.

LWR-X8460 Status +	System + Network + Statistics + Logout					
No password set!						
There is no password set on the	There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration					
General plugins Network	plugins Output plugins					
Collectd Settings	3					
Collectd is a small daemon for co daemon.	ilecting data from various sources through different plugins. On this page you can change general settings for the collectd					
Base Directory	/var/run/collectd					
Directory for sub- configurations	/etc/collectd/conf.d					
Directory for collectd plugins	/usr/lib/collectd					
Used PID file	/var/run/collectd.pid					
Datasets definition file	/usr/share/collectd/types.db					
Data collection interval	30 Seconds					
Number of threads for data collection	2					
Try to lookup fully qualified hostname						
Additional Field	Add					

## **General Plugins**

LWR-X8460 Status - System - Network - Statistics - Logout				
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration				
General plugins Network plugins Output plugins				
Processor         System Load         Memory         Sensors         Thermal           CPU Plugin Configuration         The cpu plugin collects basic statistics about the processor usage.         East of the processor usage.         East of the processor usage.				
Enable this plugin 🛛				

Features	Options	Description	
Processor	Enable	The cpu plugin collects basic statistics about the processor usage.	
	Disable		
System Load	Enable	The load plugin collects statistics about the general system load.	
	Disable		
Memory Enable		The memory plugin collects statistics about the memory usage.	
	Disable		
Sensors	Enable	The sensors plugin uses the Linux Sensors framework to gather environmental	
	Disable	statistics.	
Thermal	Enable	The thermal plugin will monitor temperature of the system. Data is typically	
	Disable	read from /sys/class/thermal/"/temp.	

#### **Network Plugins - Interfaces**

The interface plugin collects traffic statistics on selected interfaces.

LWR-X8460 Status +	System + Network + Statistics + Logout				
No password set! There is no password set on the Go to password configuration of the set	his router. Please configure a root password to protect the web interface and enable SSH. on				
General plugins Network	plugins Output plugins				
Interfaces Wireless	Interfaces Wireless				
Interface Plugin	Configuration ic statistics on selected interfaces.				
Enable this plugin					
Monitor interfaces	wifi1  soc0 wifi2 soc1 br-lan v				
Monitor all except specified					

#### **Network Plugins - Wireless**

The iwinfo plugin collects statistics about wireless signal strength, noise and quality.

LWR-X8460 Status +	System + Network + Statistics + Logout					
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration						
General plugins Network plu	ugins Output plugins					
Interfaces Wireless						
	ugin Configuration about wireless signal strength, noise and quality.					
Monitor all except specified						

#### **Output Plugins - Network**

The network plugin provides network-based communication between different collectd instances. Collectd can operate both in client and server mode. In client mode locally collected data is transferred to collectd server instance, in server mode the local instance receives data from other hosts. Users can add Listener interfaces and Server interfaces.

LWR-X8460 Status - System - Network - Statistics - Logout				
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration				
General plugins Network plugins Output plugins				
Network RRDTool				
Network Plugin Configuration The network plugin provides network based communication between different collectd instances. Collectd can operate both in client and server mode. In client mode locally collected data is transferred to a collectd server instance, in server mode the local instance receives data from other hosts. Enable this plugin				
Listener interfaces This section defines on which interfaces collectd will wait for incoming connections. This section contains no values yet Add				
Server interfaces This section defines to which servers the locally collected data is sent to. This section contains no values yet Add				

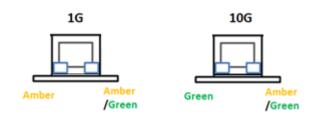
#### **Output Plugins - RRDTool**

The rrdtool plugin stores the collected data in rrd database files, the foundation of the diagrams.

LWR-X8460 Status -	System + Network + Statistics + Logout					
No password set! There is no password set on this router. Please configure a root password to protect the web interface and enable SSH. Go to password configuration						
General plugins Network	General plugins Network plugins Output plugins					
Network RRDTool						
	Configuration control of the diagrams. ues will result in a very high memory consumption in the temporary directory. This can render the device unusable!					
Storage directory	/tmp/rrd Ote: as pages are rendered by user 'nobody', the *.rrd files, the storage directory and all its parent directories need to be world readable.					
Only create average RRAs	reduces rrd size					
Stored timespans	1hour 1day 1week 1month 1year Seconds; multiple separated by space					
Rows per RRA	100					
Additional Field	✓ Add					

## **APPENDIX A: LED INDICATOR EXPLANATIONS**

▶ RJ-45 LAN LED



## 1Gb RJ-45 Define:

Speed	Amber (Active)	Green/Amber (Link)
10M	Blinking / Data access	OFF
100M	Blinking / Data access	ON (Green)
1G	Blinking / Data access	ON ( <b>Amber</b> )

#### 10Gb RJ-45 Define:

Speed	Green (Active)	Green/Amber (Link)
100M	Blinking / Data access	OFF
1G	Blinking / Data access	ON (Amber)
10G	Blinking / Data access	ON (Green)

## **APPENDIX B: TERMS AND CONDITIONS**

## **Warranty Policy**

- **1.** All products are under warranty against defects in materials and workmanship for a period of one year from the date of purchase.
- **2.** The buyer will bear the return freight charges for goods returned for repair within the warranty period; whereas the manufacturer will bear the after-service freight charges for goods returned to the user.
- **3.** The buyer will pay for repair (for replaced components plus service time) and transportation charges (both ways) for items after the expiration of the warranty period.
- **4.** If the RMA Service Request Form does not meet the stated requirement as listed on "RMA Service, "RMA goods will be returned at customer's expense.
- 5. The following conditions are excluded from this warranty:
  - Improper or inadequate maintenance by the customer
  - Unauthorized modification, misuse, or reversed engineering of the product
  - Operation outside of the environmental specifications for the product.

## **RMA Service**

### **Requesting an RMA#**

- 1. To obtain an RMA number, simply fill out and fax the "RMA Request Form" to your supplier.
- **2.** The customer is required to fill out the problem code as listed. If your problem is not among the codes listed, please write the symptom description in the remarks box.
- **3.** Ship the defective unit(s) on freight prepaid terms. Use the original packing materials when possible.
- **4.** Mark the RMA# clearly on the box.



**Note**: Customer is responsible for shipping damage(s) resulting from inadequate/loose packing of the defective unit(s). All RMA# are valid for 30 days only; RMA goods received after the effective RMA# period will be rejected.

## **RMA Service Request Form**

When requesting RMA service, please fill out the following form. Without this form enclosed, your RMA cannot

### be processed.

RMA No			Reasons to Return: a Repair(Please include failure details) a Testing Purpose			
Compa	ny:	Contact Person:	Contact Person:			
Phone No.		Purchased Date:	Purchased Date:			
Fax No.:		Applied Date:	Applied Date:			
Return Shipping Address: Shipping by:  a Air Freight  bea  bea  bea  bea  bea  bea  bea  bea						
Item	Model Name	Serial Number	Configuration			

Item	Problem Code	Failure Status
<u> </u>	+	

\*Problem Code: 05: HDC Fail 06: Bad Slot

 01:D.O.A.
 07: BIOS Problem

 02: Second Time
 08: Keyboard Controller Fail

 R.M.A.
 09: Cache RMA Problem

 03: CMOS Data Lost 10: Memory Socket Bad 04: FDC Fail 11: Hang Up Software 12: Out Look Damage

13: SCSI	19: DIC
14: LPT Port	20: Buz
15: PS2	21: Shu
16: LAN	22: Pan
17: COM Port	23: CR1
18: Watchdog Timer	24: Oth

) zzer ut Down el Fail r Fail

ners (Pls specify)

**Request Party** 

#### **Confirmed By Supplier**

Authorized Signature / Date

Authorized Signature / Date