

User Manual

LTE Cat.5/ 6 Outdoor Gateway OH-735

Version	V1.0
Date	June, 2018



Green Packet Berhad Company

1. Overview

OH-735 comes with double system capacity by 1TX4Rx antennas or Carrier Aggregation; providing increased data rate, downlink up to 300 Mbps.

1TX4Rx antennas over the same frequency. For operator who has limited spectrum, it helps make the most of spectral efficiency (bps/MHz) and improve data capacity as well.

A high quality patch antenna is integrated inside to ensure stable connectivity and extended coverage.

OH-735 is compliant with IP-66 (Ingress Protection ratings), and its operating temperature is from -40 to +55 degree C. All those factors contribute to a rugged yet cost-effective solution to operate in extreme weather condition.



2. Hardware Specifications

2.1 Basic Description

Feature	Description	Remarks
3GPP Release Version	Release 10	
UE Category	Cat.5, DL MIMO 4x4 Cat. 6, 2CA	DL up to 300 Mbps
Ethernet port	Gigabit RJ-45 port x 1	
Antenna Number	4	
LED Indicators	Power, SIM/ Internet, LAN, Signal Strength x 4	8 LEDs in total
Reset/ Reboot button	Tact switch	In side the housing
Power supply	Input: Universal range 100~240VAC Output: 12V/ 2A DC	

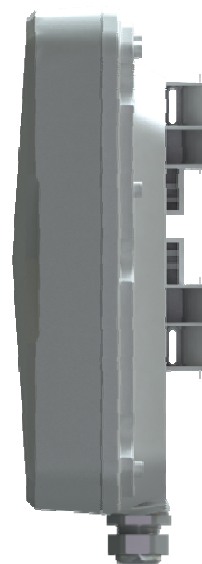
2.2 ID Design

2.2.1 Appearance Index_OH-735

Index	Description
Dimension	288(H)x 288 (W)x 88 (T)mm
Weight	About 2.5 kg
Color	Grey



Front view



Side view

2.3 Interface and Button

OH-735

Interface	Description
RJ-45 x 1	Gigabit RJ45 x 1
SIM Slot x 1	Mini SIM. Support 1.8V and 3.3V SIM and USIM)
Reset/ Reboot button	Tact switch

2.4 Software Specs

SW Spec	Description
LTE Standard	3GPP Release 10
Downlink MIMO	DL MIMO 2x2 & 4x4
UE Category	Cat.5/ Cat.6
Full band search	Support
Multiple APN	Support
SIM Lock	Support
SIM function	1.8V and 3.3V SIM and USIM card
PIN/ PUK Code	

2.5 Networking

Networking Spec	Description	Remarks
IPv4		
IPv6	only under LTE mode	
IPv4/IPv6 dual stack	only under LTE mode	
Network Mode - NAT Mode		
Network Mode - Tunnel Mode	supported L2/L3 L2TP,GRE VPN	Customization Feature
Network Mode - Bridge Mode		Customization Feature
Network Mode - Router Mode		supported NAT, VPN route
DHCP Client in WAN		supported, no DHCP client but get IP from LTE signaling
DHCP Server in LAN	For NAT Mode, Supports 253 clients max.	
NTP Client		
Network QoS		
DDNS Client		
UPNP		
HTTP(s) Server		
DSCP Tag		Customization Feature
ALG Support (FTP/SIP/ etc...)		
Port trigger/ Port forward		
Packet Counter		
VLAN Passthrough		
1Tx/ 4Rx		

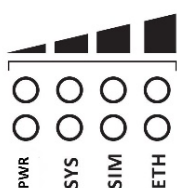
2.6 Device Management

Spec	Description	Remarks
User Name / Password configuration	Support password configuration only	
Two-level User Name/ Password configuration	support 2 levels: user and admin	
Web Access (Remote/Local)	Supported.	
Local Firmware Update	Supported.	
SNMP Agent	Require customization.	
TR069	Ready for IOT	
TR-143	Not supported.	
OMA-DM	Not supported.	
FOTA Firmware Upgrade	Require IOT with different networks	

2.7 Security

Spec	Description	Remarks
User Name/Password configuration	Support password configuration only	
L2/L3 Firewall	MAC/IP Filter supported	
- Basic firewall	supported	
- Port Forwarding	supported	
- Port trigger	supported	
- DMZ	supported	
- Remote WAN Ping	supported	
- Remote Web Access Control	supported	

2.8 LED Indicators



LED	State	Description	LED Behavior	LED illustration
Signal LEDs	Signal Strength weak	Signal strength is weak	Only first signal strength LED on, the other three off	●○○○
	Signal Strength medium	Signal strength is normal	The first two lights on, the last two off	●●○○
	Signal Strength good	Signal strength is good	The first three lights on, the last one off	●●●○
	Signal Strength strong	Signal strength is strong	Four signal LEDs on	●●●●
SYS(internet) LED	No access in LTE network	CPE not register to LTE network	The SYS LED OFF, SIM LED on	○○●○
	Access in LTE network	CPE register to LTE network	The SYS and SIM LED on	○●●○
SIM LED	No SIM card	Detect no SIM Card	The SIM LED Off	○○○○
	SIM card abnormal	SIM Card in abnormal state	The SIM LED Blinking	○○★○
	SIM card normal	SIM Card work well	The SIM LED on	○○●○
LAN LED	LAN Connected	Device connect to CPE	The ETH LED on	○○○●

	LAN Disconnected	No device connects to CPE	The ETH LED off	○○●○
PWR LED	Steady On	Power On	The PWR LED on	●○○○
	Off	Power Off	The PWR LED off	○○○○
	Firmware Upgrading	CPE starting the firmware upgrading	The first four RF LEDs blinking alternately.	

RF Specifications

LTE RF Spec	Capability				Remarks
	Description			Unit	
LTE Channel Band Width	5MHz / 10MHz / 15MHz / 20MHz			MHz	3GPP compliant
LTE RF Standard	All RF specification should reference with 3GPP Release9 TS 36.101				Compliant with 3GPP with margin
LTE Antenna Efficiency		> 50%			

Environment Specifications_OH-735

No.	Feature	Capability				Remarks
		Min	Typical	Max	units	
1	Operating temperature	-40		55	°C	
2	Storage temperature	-40		60	°C	
3	Operating humidity	0		95	%	
4	Storage humidity	0		95	%	
5	IP Rating		IP66			(to confirm if IP67 is feasible)

3. Appendix-Deliverable

Article Number	Content	Remark
OH-735	- 1 x Assembled product ODU - 1 x Quick installer guide - Mounting kit	Detail Deliverables need to be defined by customer agreement
*Option 1:	PoE Injector x 1 Power adapter 12V / 2A x 1	Important note: Package should include one of the optional items. There will be price difference among the optional items.
*Option 2:	WG-1200 Wi-Fi Router x 1 Power adapter 12V / 2A x 1	

Installation Quick Guide

QIG (Logo can be customized)

Packaging

White Box, Device Label, Box Label

FCC Regulations:

- This device complies with part 15 of the FCC Rules. 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.
- This equipment has been tested and found to comply with the limits for a Class B 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 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/ TV technician for help.
- Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Greenpacket will provide customers with comprehensive technical support. Any problem please contact support department directly.

Green Packet Berhad

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