LEMBAR PENGESAHAN
LAPORAN HASIL UJI
Test Report

No. Aplikasi : 0806-24
Application Number

Nomor LHU : R-41/0742/2024
Test Report Number

DATA APLIKASI
Applicant's Data

Aplikan *Applicant's*	:	FARRA EKATAMA SOLUSI
Alamat Aplikan *Address of Applicant's*	:	*SATRIO TOWER, LANTAI 6, UNIT 1* *JL. PROF. DR. SATRIO BLOK C4, JAKARTA SELATAN*

DATA PERANGKAT
Test Item's Data

Nama Perangkat *Equipment*	:	4G Cellular Router
Merek/Tipe *Brand Name/ Type*	:	PUSR / USR-G806w
Nomor Seri/IMEI *Serial Number/ IMEI*	:	016013230711000003208
Buatan *Made In*	:	China

Tanggal Terima / Bayar *Date of Paid*	:	23 Oktober 2024	**Jenis Pengujian** *Type of Testing*	:	UJI LABORATORIUM
Tanggal Mulai Uji *Date of Test*	:	27 Oktober 2024	**Lokasi Pengujian** *Test Location*	:	Tapos - Depok
Tanggal Selesai Uji *Date of End*	:	30 Oktober 2024			

Ketentuan Umum
General Statement

A. Laporan pengujian ini hanya berlaku untuk sampel uji sebagaimana diatas
This the report is only valid the test item which is stated on the data above

B. Persyaratan Teknis
Technical Specification

CISPR 32 / ITU-T K.116,

Kesimpulan
Conclusion

BERDASARKAN PERSYARATAN TEKNIS PERANGKAT TERSEBUT DINYATAKAN
Base on technical specification the equipment is

Sesuai (Comply)

Depok, 30 Oktober 2024

Disahkan Oleh
An. Kepala Balai Besar Pengujian Perangkat Telekomunikasi
Ketua Tim Kerja Laboratorium Pengujian Radio Frequency dan Kalibrasi

Dokumen ini ditandatangani secara elektronik oleh
KETUA TIM KERJA LABORATORIUM PENGUJIAN
RADIO FREQUENCY DAN KALIBRASI

KARIJADI

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www.kominfo.go.id, www.sdppi.kominfo.go.id, bbppt.postel.go.id

Balai Besar Pengujian Perangkat Telekomunikasi
Direktorat Jenderal Sumber Daya dan Perangkat Pos dan Informatika
Kementerian Komunikasi dan Informatika

LAPORAN HASIL UJI
(LHU)
(0806-24)

4G Cellular Router
PUSR/ USR-G806w
01601323071100003208
China

Tahun 2024

DAFTAR ISI

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7. Lampiran Spesifikasi dan Deklarasi Teknis..... (terlampir)

HASIL PENGUJIAN

Temperature : 23.1 °C Kelembapan : 57.0%

No. ***No.***	**Item Uji** ***Test Item***	**Spesifikasi** ***Specification***	**Hasil Uji** ***Measurement Result***	**Ket** ***Remark***
1	Radiated Emission at 30 MHz – 1 GHz (10m Chamber)	CISPR 32/ ITU-T K.116		
	• Class A limits dB(µV)			
	- Quasi Peak			
	Frequency 30 to 230 MHz	40 dB(µV)/m	Lihat Tabel	
	Frequency 230 to 1000 MHz	47 dB(µV)/m	Lihat Tabel	
2	Radiated Emission at 1 – 6 GHz (3m Chamber)	CISPR 32/ ITU-T K.116		
	• Class A limits dB(µV)			
	- Peak			
	Frequency 1 to 3 GHz	76 dB(µV)/m	Lihat Tabel	
	Frequency 3 to 6 GHz	80 dB(µV)/m	Lihat Tabel	
	- Average			
	Frequency 1 to 3 GHz	56 dB(µV)/m	Lihat Tabel	
	Frequency 3 to 6 GHz	60 dB(µV)/m	Lihat Tabel	
Catatan :				

Penguji
Miftah Adiguna


Penyelia Teknik Pengujian
Rofi Yuliansyah


DAFTAR ALAT YANG DIGUNAKAN

No	Nama Alat	Merek/Tipe	No Serial	Tanggal Kalibrasi
Radiated Emission (30 MHz – 1 GHz)				
1	EMI Receiver	Rohde & Schwarz / ESW44	103274	9 Agustus 2024
2	Antenna	Rohde Schwarz / HL562E	102208	-
Radiated Emission (1 – 6 GHz)				
1	EMI Receiver	Rohde & Schwarz / ESW44	103282	8 Agustus 2024
2	Antenna	Rohde & Schwarz / HF907	103151	-

EMI Test Report

Air Pressure: 1005 mbar
Uncertainty: 3.6 dB

EUT: 0806-24

Serial Number	01601323071100003208
Description	4G Cellular Router
Manufacturer	PUSR
Type	USR-G806w
Made in	China

02_EN 55032 E Field SAC 10m Class A below 1GHz

Hardware Setup Scheme — EMI Radiated Electric Field Strength [dBµV/m]

Frequency Range	State	Limit Line	Receiver Mode	Comment
1: 30 MHz - 1 GHz	Active	EN 55032 E Field SAC 10m QP Class A	Time Domain Scan	

Measurement Steps Performed

Overview Measurement, Data Reduction, Final Measurement

Overview Measurement

Measurement Settings

Frequency Range	Step Size	Detectors	Meas. BW	Meas. Time	Preamplifier
1: 30 MHz - 1 GHz	30 kHz	PK+	120 kHz	0.1 s	0 dB

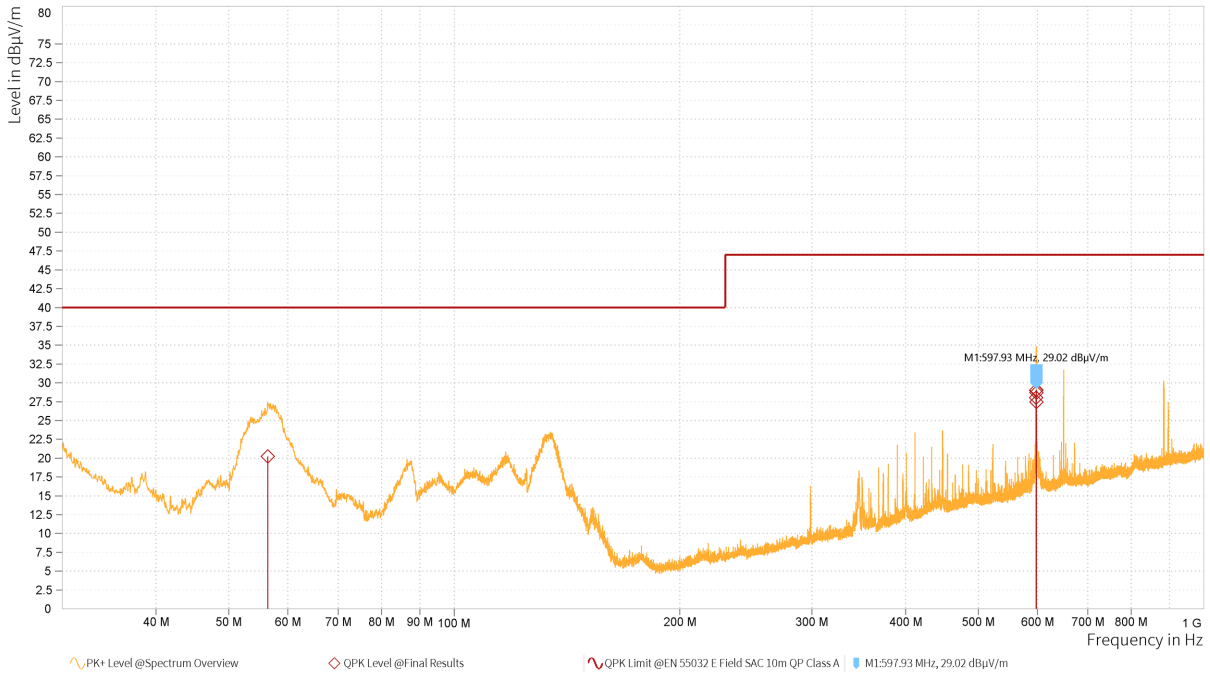
Final Measurement

Measurement Settings

Frequency Range	Detectors	Meas. BW	Meas. Time	Preamplifier
1: 30 MHz - 1 GHz	QPK	120 kHz	5 s	0 dB

Hardware Setup (Rgx indicates Frequency Range in Template)

Frequency Range	Receiver	Antenna
Rg1: 30 MHz - 6 GHz	ESW44	HL562E



EMI Final Results (1/2)

Rg	Frequency [MHz]	QPK Level [dBµV/m]	QPK Limit [dBµV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Meas. Time [s]	Time of Meas.	Source
1	56.400	20.20	40.00	19.80	-26.87	V	-52	3.00	120.000	5.000	11:54:13 am	Critical Points
1	597.270	28.99	47.00	18.01	-10.79	V	-30	3.00	120.000	5.000	11:54:39 am	Critical Points
1	597.300	28.01	47.00	18.99	-10.79	V	-30	3.00	120.000	5.000	11:54:46 am	Critical Points
1	597.840	27.45	47.00	19.55	-10.78	V	-30	3.00	120.000	5.000	11:54:53 am	Critical Points
1	597.870	28.67	47.00	18.33	-10.78	V	-30	3.00	120.000	5.000	11:55:00 am	Critical Points
1	597.930	29.02	47.00	17.98	-10.78	V	13	3.00	120.000	5.000	11:55:17 am	Critical Points

EMI Final Results (2/2)

Rg	Frequency [MHz]	Attachments	Comment
1	56.400		
1	597.270		
1	597.300		
1	597.840		
1	597.870		
1	597.930		

Test Report

Air Pressure: 1005 mbar
Uncertainty: 3.4 dB

EUT: 0806-24

Serial Number	016013230711000003208
Description	4G Cellular Router
Manufacturer	PUSR
Type	USR-G806w
Made in	China

EN 55032 E Field FAR 3m Class A above 1 GHz

Hardware Setup Scheme EMI Radiated Electric Field Strength [dBµV/m]

Frequency Range	State	Limit Line	Receiver Mode	Comment
1: 1 - 6 GHz	Active	EN 55032 E Field FAR 3m Class A	Time Domain Scan	

Measurement Steps Performed

Overview Measurement, Data Reduction, Final Measurement

Overview Measurement

Measurement Settings

Frequency Range	Step Size	Detectors	Meas. BW	Meas. Time	Preamplifier
1: 1 - 6 GHz	250 kHz	PK+, AVG	1 MHz	0,02 s	20 dB

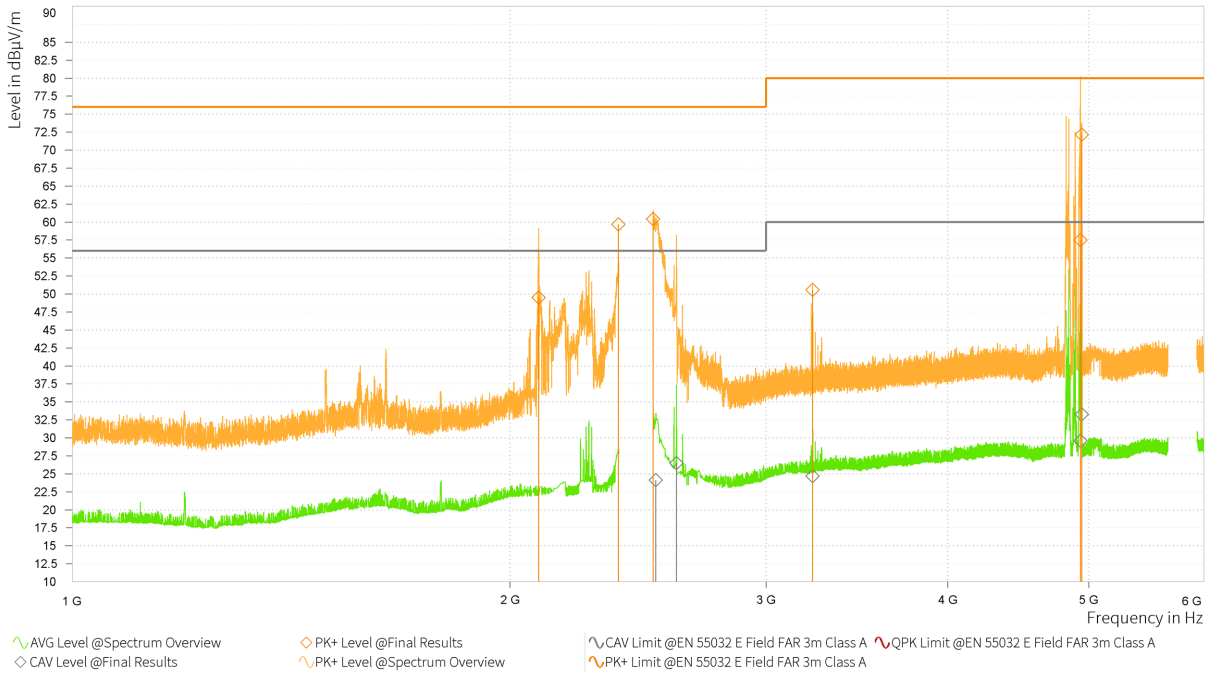
Final Measurement

Measurement Settings

Frequency Range	Detectors	Meas. BW	Meas. Time	Preamplifier
1: 1 - 6 GHz	PK+, CAV	1 MHz	15 s	20 dB

Hardware Setup (Rgx indicates Frequency Range in Template)

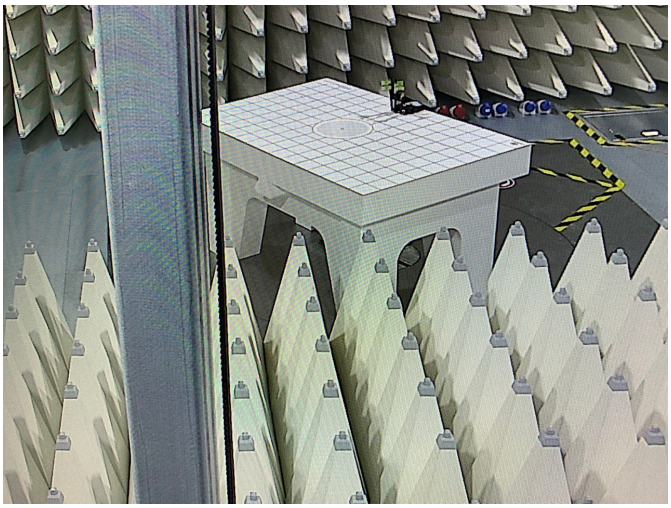
Frequency Range	Receiver	Antenna
Rg1: 1 GHz - 18 GHz	ESW44	HF907

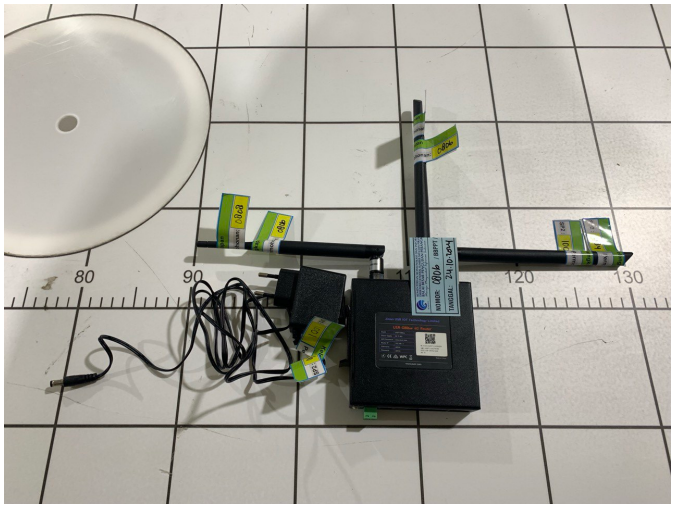


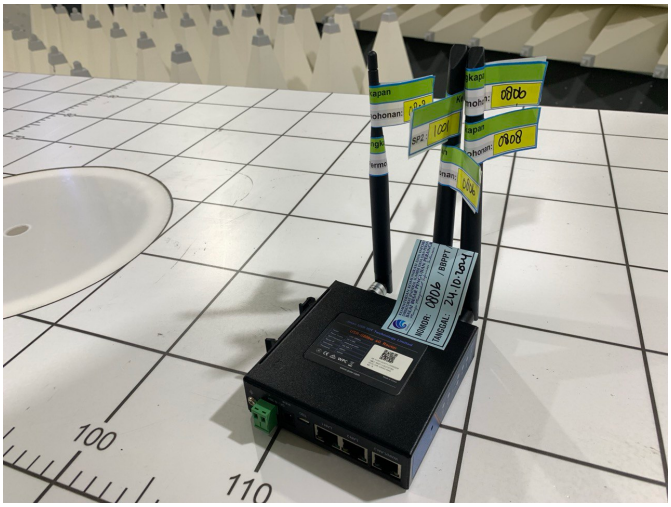
EMI Final Results

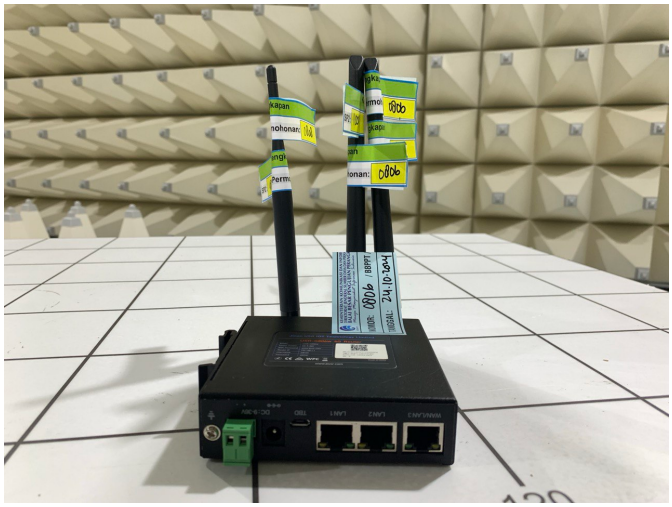
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	CAV Level [dBµV/m]	CAV Limit [dBµV/m]	CAV Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	2.093,000	49,49	76,00	26,51				-4,89	V	92,978	3,00	1.000,000
1	2.374,500	59,67	76,00	16,33				-4,14	V	-125,2611	2,00	1.000,000
1	2.508,000	60,40	76,00	15,60				-2,99	V	160,5583	1,00	1.000,000
1	2.518,500				24,09	56,00	31,91	-2,94	V	154,3991	1,00	1.000,000
1	2.603,000				26,49	56,00	29,51	-2,59	V	63,77032	2,00	1.000,000
1	3.229,500	50,54	80,00	29,46				0,07	V	103,9863	2,00	1.000,000
1	3.229,500				24,68	60,00	35,32	0,07	V	103,9863	2,00	1.000,000
1	4.934,000	57,48	80,00	22,52	29,57	60,00	30,43	5,16	V	-14,50253	3,00	1.000,000
1	4.944,000	72,14	80,00	7,86	33,23	60,00	26,77	5,17	H	-139,9181	4,00	1.000,000

Gambar Sampel Benda Uji













USR-G806w specification

Better Wi-Fi industrial router



Introduction

USR-G806w is the pro version of our all-time bestseller G806 that inherited its' best features, including industrial design, compact size, multiple connection interfaces. It delivers high performance for mission-critical cellular communication in rigorous environments.

Equipped with 4G LTE, Wi-Fi, and three Ethernet ports, this router offers unstoppable connection continuity with a backup through automatic WAN failover. The Wi-Fi is functional in: Access point, Station mode and repeater mode.

USR-G806w is an excellent fit in various IoT and M2M solutions that require easy setup, reliable network, and remote accessibility, such as service robot, inspection robot, unmanned vehicle networking, massage chair networking, AGV car and other industrial application scenarios.

Features

Stable And Reliable

- Industrial design Metal shell, IP30 protection.
- Wide operating temperature. Wide voltage input,reverse polarity protection.
- ESD,Surge,EFT protection.
- Embedded hardware watchdog, self-recovers from malfunctions, maintaining high device availability.

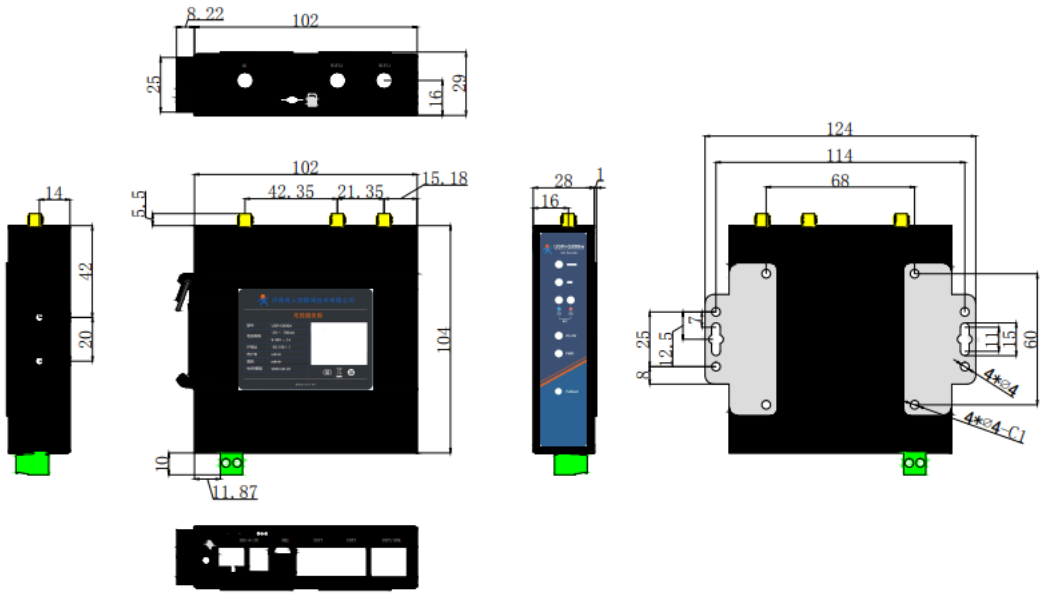
Uninterrupted network access

- Supports 2G/3G/4G network all over the world ,supports APN/VPDN sim card.
- Failover between 4G and WAN, ensures automatic switch to alternative backup connection,effectively ensuring uninterrupted data transmission.
- Link backup: mutual backup of wired, 4G cellular and WiFi networks
- Equipped with strong Wi-Fi capability,802.11 a/b/g/n,2.4G Wi-Fi,2*2 MIMO, up to 300Mbps,Support AP/STA/repeater mode
- VPN tunnel detection: maintains stable connection of the VPN tunnel, ensuring continuous transmission.
- Multi-layer link detection mechanism, automatic redial and recovery.

Rich functions

- Supports PUSR cloud platform to facilitate remote monitoring and central management of large-scale device networks.
- Supports remote monitoring, upgrade and parameter configuration, remote access to the built-in web pages.
- Wall-mounting and DIN-rail mounting options available,easy to install.
- Supports IPsec VPN, PPTP,L2TP, OPENVPN,GRE etc., ensuring secure data transmission.
- Supports firewall functions including NAT, access control, DDoS defense, IP-MAC binding, etc., protecting the network against external attacks.
- Supports APN automatic inspection ,mode switch ,SIM information display, supports private sim card.
- Supports DDNS,PPPOE,DHCP,Static IP.
- Allows multiple network management methods including SSH, WEB, TELNET and a network management platform.
- Supports firewall, NAT,DMZ,black and white list of access control
- Support SNMP,VLAN

Dimensions



- Unit: mm.
- Dimensions: 104*102*28.0mm(L*W*H).Power terminal, antenna connector are not included.
- Installation Method: 35mm DIN-rail mounting,Panel mounting.

G806 series ordering guide

USR-G806 ordering guide			
model	USR-G806-<M>	USR-G806w-<M>	USR-G806s-<M>
Region <M>	-43：China/India -G：Global -A:North America -E：EMEA/South Africa/Thailand -AU：Latin/Australia/New Zealand -EAU:Europe/Australia/New Zealand	-G: Global -43: China/India -E: EMEA/Thailand -AU：Latin/Australia/New Zealand	-43：China/India -EAU:EMEA/Thailand
Wi-Fi	AP	AP/STA/Repeater	AP
Ethernet port	1WAN/LAN+1LAN	1WAN/LAN+2LAN	1WAN/LAN+1LAN
Serial port	--	---	RS485
Dimensions（mm）	100.0*94.0*29.0	104.0*102.0.28.0	90.0*84.0*25.0

Specifications

USR-G806w hardware specification				
Cellular Interface	Frequency	-E	-AU	-G
		TDD-LTE:B38/40/41	TDD-LTE:B40	TDD-LTE:B34/38/39/40/41
		FDD-LTE：B1/3/7/8/20/28A	FDD-LTE:B1/2/3/5/7/8/28	FDD-LTE: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
		WCDMA：B1/8	WCDMA：B1/2/4/5/8	WCDMA：B1/2/4/5/6/8/19
		GSM/EDGE:B3/8	GSM/EDGE:B2/3/5/8	GSM/EDGE:B2/3/5/8
	Antenna	1 x SMA-K		
	SIM card	1 x (3 V & 1.8 V) Standard 4FF SIM		
Ethernet	WAN	1 x WAN port (can be configured to LAN) 10/100 Mbps, compliance with IEEE 802.3, supports auto MDI/MDIX,1.5KV network isolation transformer protection		
	LAN	1 x LAN port, 10/100 Mbps, compliance with IEEE 802.3, IEEE 802.3u standards, supports auto MDI/MDIX,1.5KV network isolation transformer protection		
Indicators	PWR	red,always on after powered on		
	WIFI	green,always solid on when WiFi is enabled and working properly		
	2/3/4G mode indicator	2G led is on after connected to 2G network		
		3G led is on after connected to 3G network		
		Both leds is on after connected to 4G network		
	SIG	Signal strength：2 LED is solid on,strongest signal		
Wi-Fi	Standards & Frequency	IEEE 802.11b/g/n， 2.4GHz， AP/STA/Repeater mode		
	Data speed	300Mbps		
	Antenna	2 x RP-SMA-K		
	MIMO	2×2		
	Transmission distance	500 meters by line of sight.Actual transmission distance depends on environment of the site.		
	WiFi users	Up to 20 simultaneous connections		
Power Supply	Adaptor	DC 12V/1A		
	Connector	DC Power Jack Barrel Type Female 5.5*2.1mm Round socket or 2 PIN industrial terminal block,reverse polarity protection		
	Input voltage	DC 9-36V		

	Power consumption	Average 260mA/12V
Physical Characteristics	Casing material	Metal shell,IP30
	Dimensions	104.0*102.0*28.0 (L*W*H, antenna pedestal, terminal block and DIN Rail are not included)
	Installation	Panel mounting, DIN-Rail mounting
	EMC	Static IEC61000-4-2, level 3
		Pulsed Electric Field IEC61000-4-4, level 3
		Surge IEC61000-4-5, level 3
	Operating temperature	-20℃~+70℃
	Storage temperature	-40℃ ~ +125℃（non-condensing）
	Operating humidity	5%~95%（non-condensing）
Others	Reload	Pinhole reset button
	TBD	Debug interface (TTL Level)
	Ground protection	Screw
	Approvals	CE, WPC, RCM， ROHS, WEEE
USR-G806w Software Specifications		
Network Connection	WAN protocol	PPP, PPPoE, DHCP client
	LAN protocol	ARP, DHCP server, NAT， VLAN
	4G network access	Auto APN/VPDN, private network
		Access authentication: CHAP/PAP
	WLAN security	Open system,WPA/WPA2 PSK
		TKIP/AES encryption
	IP routing	Static routing
	Network diagnosis	Ping,route trace,DNS
Device management	Configuration	Web
	Remote management	SSH, AT command,SNMP,SMS
	PUSR platform	Remote monitoring,remote upgrade,alarming,base station location,remote access to web pages of the router
Security	Failover backup	WiFi WAN, Mobile, Wired options, each of which can be used as an automatic Failover
	Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
	VPN	Supports PPTP, L2TP, GRE, IPSEC VPN (IKEv1), OPENVPN protocols
Service	DDNS	Remote access the device through domain name

	Alarm	Email,SMS
		NTP client
	Others	Timing task

Purchase and Support

■ For more information please visit our websites:

Official website:https://pusr.com

Official shop:https://shop.usriot.com

Technical support: http://h.usriot.com/

DEKLARASI TEKNIS ALAT/PERANGKAT TELEKOMUNIKASI

A. Informasi Pemohon

PLG ID : 10441

B. Informasi Alat/Perangkat

APL ID : 9627

1.	Catu Daya	□ Vac 220 V □ Vdc : …. V □ …..	☑ DC Adaptor □ PoE
2.	Konstruksi	☑ Berdiri Sendiri □ Tergabung	□ Terpisah
3.	Area Penggunaan Produk	□ Area Residensial ☑ Area Industri atau komersil	
4.	Frekuensi Kerja DUT (Bisa lebih dari satu)	Band Frequency 40 atau LTE (2300MHz)	

C. Fitur Telekomunikasi yang terdapat pada Alat/Perangkat

☑ Fitur LTE 2300 MHz
□ Fitur ……
□ Fitur ……

D. Syarat Alat/Perangkat yang diujikan

- **Umum**

☑ Alat/perangkat yang diujikan adalah alat/perangkat yang merupakan produk akhir
☑ Alat/perangkat yang diujikan tidak pernah mengalami modifikasi sebelumnya (hardware dan software)
□ Menyertakan alat/perangkat lainnya yang tergabung dalam satu sistem dengan alat/perangkat yang diujikan sehingga dapat bekerja (khusus yang konstruksinya terpisah)

- **Catu Daya**

□ Vac	:	Tegangan maksimum 250 Vac, Arus maksimum 16 A, 1 fasa
□ Vdc	:	Tegangan maksimum 400 Vdc, Arus maksimum 16 A (menyertakan power supply sendiri untuk tegangan > 24 Vdc)
☑ DC Adaptor	:	Merupakan bagian dari perangkat dan merupakan produk OEM
□ PoE	:	Menyertakan adaptor yang merupakan produk OEM

E. Informasi Lainnya

- Hanya mengujikan Band Frequency 40 atau LTE (2300MHz)
- .....
- .....

PT. Farra Ekatama Solusi

Cap/Stempel Perusahaan