


WiFi + 4G onBoard

Complete WiFi system antenna + router


 **WiFi+4G onBoard** in a complete all-in-one system that allows Internet connectivity from a nearby WiFi hotspot or cellular network with up to 4G speed, and to share it wirelessly through the built-in hotspot or through Ethernet. The receiver auto-switches between WiFi signal and cellular data to maintain Internet connectivity up to 20 Miles from the coast.

The hotspot allows up to 50 WiFi users simultaneous connections and offers the possibility to assign a private password to restrict the access to unknown users.

WiFi+4G onBoard can be completely managed wirelessly with a smartphone, tablet or laptop through a web browser interface. No additional cables or drivers are required.

WiFi+4G onBoard includes a professional high-speed router, a 4dB external waterproof 4G antenna, and a high power 10dB external waterproof WiFi antenna. Cables, mounts and connectors to complete the installation to be purchased separately. It requires a data-only SIM card (not included in the package) with possibility of a second SIM card (optional).

The system is highly customizable to match the user requirements, please refer to the system configuration table to find the setup that fits the best.

 **WiFi + 4G onBoard** è un sistema sviluppato per gestire la connettività Internet di bordo: permette di collegarsi rapidamente agli hotspot WiFi presenti e alla rete mobile 4G, condividendo il segnale a bordo tramite l'hotspot integrato o via Ethernet. Il sistema seleziona automaticamente la migliore rete disponibile al momento per mantenere la connettività Internet a bordo in ogni circostanza, anche durante la navigazione e fino a 20 miglia di distanza dalla costa.

L'hotspot del sistema permette fino a 50 connessioni simultanee di utenti e offre la possibilità di assegnare una password privata per limitare l'accesso agli sconosciuti.

WiFi + 4G onBoard può essere gestito semplicemente con uno smartphone, tablet o laptop tramite un'interfaccia Web intuitiva, senza la necessità di utilizzare cavi o driver aggiuntivi.

WiFi + 4G onBoard include un router professionale ad alta velocità, un'antenna 4G impermeabile esterna da 4dB e un'antenna WiFi impermeabile esterna da 10dB. I cavi di collegamento, i connettori e i supporti antenna sono venduti separatamente. Richiede una scheda SIM solo dati (non inclusa nel set) con possibilità di aggiunta di una seconda SIM.

Il sistema è estremamente personalizzabile a seconda delle esigenze dell'utente: consultate la tabella di configurazione che segue per selezionare il vostro setup ideale.

LTE
Cat 4



Up to 150 Mbps

WAN
failover

Automatic switch
to available backup
connection



Wireless Access
Point

RMS

Remote
Management
System

Up to
30 dBm


High TX power

2.4 GHz WiFi WATERPROOF
ANTENNA

4G/LTE WATERPROOF
ANTENNA

4G/LTE + WiFi
ROUTER



 **WiFi + 4G onBoard** ist in einem kompletten All-in-One-System, das die Internetverbindung über einen nahe gelegenen WiFi-Hotspot oder ein Mobilfunknetz mit bis zu 4G-Geschwindigkeit ermöglicht und diese drahtlos über den integrierten Hotspot oder über Ethernet freigibt. Der Empfänger wechselt automatisch zwischen WiFi-Signal und Mobilfunkdaten, um die Internetverbindung bis zu 20 Meilen vor der Küste aufrechtzuerhalten. Der Hotspot ermöglicht bis zu 50 WiFi-Benutzern gleichzeitige Verbindungen und bietet die Möglichkeit, ein privates Passwort zu vergeben, um den Zugriff auf unbekannte Benutzer einzuschränken. **WiFi + 4G onBoard** kann vollständig drahtlos mit einem Smartphone, Tablet oder Laptop über eine Webbrowser-Oberfläche verwaltet werden. Es sind keine zusätzlichen Kabel oder Treiber erforderlich. **WiFi + 4G onBoard** enthält einen professionellen Hochgeschwindigkeits-Router, eine wasserdichte 4-dB-Außenantenne und eine wasserdichte 10-dB-Hochleistungs-Außenantenne. Kabel, Halterungen und Anschlüsse zur Vervollständigung der Installation müssen separat erworben werden. Es wird eine Nur-Daten-SIM-Karte (nicht im Lieferumfang enthalten) mit der Möglichkeit einer zweiten SIM-Karte (optional) benötigt. Das System kann in hohem Maße an die Benutzeranforderungen angepasst werden. In der Systemkonfigurationstabelle finden Sie das am besten geeignete Setup.

System configuration

	Router	WiFi antenna	4G/LTE antenna	Description
WiFi onBoard	Yes	Yes	No	Connect to available hotspots and access the Internet without using a SIM card.
4G onBoard	Yes	No	Yes	Stay always connected to fast 4G data networks up to 20 miles from the coast.
4G onBoard Plus	Yes	No	Yes (x2)	Stay always connected to fast 4G data networks up to 20 miles from the coast. Increase the Internet speed and signal reception with a second 4G antenna.
WiFi + 4G onBoard	Yes	Yes	Yes	Connect to the Internet through available hotspots and switch automatically to fast 4G networks during navigation and when no hotspots are available.
WiFi + 4G onBoard Plus	Yes	Yes	Yes (x2)	Connect to the Internet through available hotspots and switch automatically to fast 4G networks during navigation and when no hotspots are available. Increase the Internet speed and signal reception with a second 4G antenna.

WiFi onBoard

Complete set for WiFi on board



- 1 x 4G/LTE + WiFi Router
- 1 x WiFi antenna 10 dB
- 1 x EU power supply 9 VDC

Code: PF AN NWIFI12

2 YEAR
WARRANTY

4G onBoard

Complete set for 4G on board



- 1 x 4G/LTE + WiFi Router
- 1 x 4G antenna 4 dB
- 1 x EU power supply 9 VDC

Code: PF AN NWIFI13

2 YEAR
WARRANTY

4G onBoard Plus

Complete set for 4G on board plus



- 1 x 4G/LTE + WiFi Router
- 2 x 4G antenna 4 dB
- 1 x EU power supply 9 VDC

Code: PF AN NWIFI11

2 YEAR
WARRANTY

WiFi + 4G onBoard

Complete set for WiFi + 4G on board



1 x 4G/LTE + WiFi Router
 1 x WiFi antenna 10 dB
 1 x 4G antenna 4 dB
 1 x EU power supply 9 VDC

Code: PF AN NWIFI08

**2 YEAR
 WARRANTY**

WiFi + 4G onBoard Plus

Complete set for WiFi + 4G on board plus



1 x 4G/LTE + WiFi Router
 1 x WiFi antenna 10 dB
 2 x 4G antenna 4 dB
 1 x EU power supply 9 VDC

Code: PF AN NWIFI14

**2 YEAR
 WARRANTY**


Router technical specifications


Hardware


Mobile	4G (LTE) – Cat 4 DL up to 150 Mbps, UL up to 50 Mbps; DC-HSPA+; UMTS; TD-SCDMA; EDGE; GPRS
CPU	Atheros Wasp, MIPS 74Kc, 550 MHz
Memory	16 MBytes Flash, 128 MBytes DDR2 RAM
Ethernet	4 x 10/100 Ethernet ports: 1 x WAN (configurable as LAN), 3 x LAN ports
Power supply	9 – 30 VDC, 4 pin DC connector
Inputs/Outputs	1 x Digital Input, 1 x Digital Open Collector Output on power connector
Connectors	1 x 4 pin DC, 4 x Ethernet, 2 x Mobile SMA, 2 x WiFi RP-SMA
SIM	2 x external SIM holders
Status LEDs	1 x bi-color connection status, 5 x connection strength, 4 x LAN status, 1 x Power
Operating temperature	-40 °C to 75 °C
Housing	Aluminium housing, plastic panels
Dimensions	100 mm x 110 mm x 50 mm
Weight	256 g

Software

Operating system	RutOS (OpenWrt based Linux OS)
SIM switch	2 SIM cards, auto-switch cases: weak signal, data limit, SMS limit, roaming, no network, network denied, data connection fail
Multiple PDN	Possibility to use different PDNs for multiple network access and services
Network protocols	TCP, UDP, IPv4, IPv6, ICMP, NTP, DHCP, DNS, HTTP, HTTPS, SSL v3, TLS, ARP, PPPoE, UPNP, SSH, Telnet, SNMP
Networking features	NAT, Static/Dynamic routing, Firewall, OpenVPN, IPsec, H.323 and SIP-alg protocol NAT helpers, allowing proper routing of VoIP packets
Unique networking features	VLAN, Load balancing, Mobile quota control, WEB Filter, Load Balancing, Network Backup, Auto Failover
Connection monitoring	Ping Reboot, Periodic Reboot, Wget Reboot, LCP and ICMP for link inspection
Authentication	Pre-shared key, digital certificates, X.509 certificates
Keep settings	Update FW without losing current configuration
Monitoring & Management	WEB UI, SSH, SMS, SNMP, JSON-RPC, FOTA, RMS
Supported languages	Busybox shell, Lua, C, C++

 Cables, connectors and mounts to be purchased separately depending on the installation type. Please see Accessories list for details.

 Cavi di collegamento, connettori e basi di montaggio da acquistare separatamente a seconda del tipo di installazione. Fare riferimento all'elenco accessori seguente.

 Kabel, Stecker und Halterungen müssen je nach Installationstyp separat erworben werden. Weitere Informationen finden Sie in der Zubehörliste.

Accessories

MA-1
Router DIN rail kit



Mounting: 35 mm DIN rail
Material: Low carbon steel
Weight: 57 g
Dimensions: mm 82x46x20

Code: PF AC NBASE021

MA-2
Router compact DIN rail kit



Mounting: 35 mm DIN rail
Material: ABS + PC plastic
Weight: 6,5 g
Dimensions: mm 70x25x14,5

Code: PF AC NBASE022

MA-3
Router surface mounting kit



Mounting: flat surface
Material: ABS + PC plastic
Weight: 2x5 g
Dimensions: mm 25x48x7,5

Code: PF AC NBASE023

PA-40
Stainless steel marine mount



Mounting: 1" x 14 thread
Material: Electropolished s. steel
Weight: 280 g
Dimensions: mm 102x70.5(Ø)

Code: PF AC NBASE013

PA-30
Four way SS ratchet mount



Mounting: 1" x 14 thread
Material: Electropolished s. steel
Weight: 680 g
Dimensions: mm 90x60x110

Code: PF AC NBASE012

PA-44
Adaptor 1"x14 thread 90mm (3.5")



Mounting: 1" x 14 thread
Material: Chrome brass
Weight: 125 g
Dimensions: mm 27x27x90 (h)

Code: PF AC NBASE024

CA-1
Pigtail 15 cm RG-58 N female/
SMA male



Cable type: RG-58 CU MIL
Connector: N female / SMA male
Length: 15 cm

Code: PF AC NCABLE009

CA-2
Pigtail 15 cm RG-58 N female/
SMA male RP



Cable type: RG-58 CU MIL
Connector: N female / SMA male RP
Length: 15 cm


Code: PF AC NCABLE010


CA-5
Cable type LMR-400 5 m N male
/N male




Cable type: LMR-400
Connector: N male / N male
Length: 5 m

Code: PF AC NCABLE013

 Cable type LMR-400 with connector N male/N male is also available in other lengths. See table below for details.

 Il cavo tipo LMR-400 con connettore N maschio/N maschio è disponibile anche in altre lunghezze. Si veda la tabella sotto riportata come riferimento.

 Der Kabeltyp LMR-400 mit Stecker N / N ist auch in anderen Längen erhältlich. Einzelheiten finden Sie in der folgenden Tabelle.

Item	Description	Code
CA-3	Cable type LMR-400 1 m N male/N male	PF AC NCABLE011
CA-4	Cable type LMR-400 3 m N male/N male	PF AC NCABLE012
CA-6	Cable type LMR-400 7 m N male/N male	PF AC NCABLE014
CA-7	Cable type LMR-400 10 m N male/N male	PF AC NCABLE015
CA-8	Cable type LMR-400 15 m N male/N male	PF AC NCABLE016

Router powering options

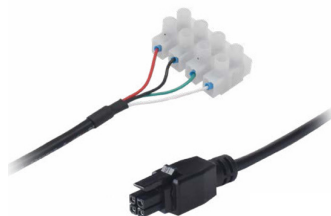
PI-3
Cigarette lighter power supply



Input voltage	9-30 VDC
Input connector	12/24 VDC
Output connector	4-pin, 3mm pitch
Maximum current	2 A
Input protection	Fuse
Cable	2x0.5mm ² , 1500 mm
LED indicator	Yes
RoHS Compliant	Yes

Code: PF AC AMP04

PI-4
Power cable with 4-way screw terminal



Input connector	4-way screw terminal
Output connector	4-pin, 3mm pitch
Cable	4x0.129 mm ² (26 AWG), 2000 mm
RoHS Compliant	Yes
Color coding	Red = Power + Black = Ground - Green = Input/Output/NC White = Input/Output/NC

Code: PF AC AMP05