

HUB 2 PLUS LTE - 9-15 V DC

CENTRAL CONTROL UNIT

The intelligent central control unit of the SAFE security system, which operates on low voltage 9–15 V DC without the need for mains power. It is ideal for guarding remote objects, cottages or warehouses, but also for protecting mobile and floating vehicles such as boats, caravans or trucks, where access to the electrical network is problematic. Certified in the 2nd security level, it meets the most demanding requirements for resistance to sabotage or signal interference, while supporting the latest trends including photo and video verification of alarms, automation or integration of IP cameras.



AES Data Encryption With a Rolling Code Algorithm

The encrypted communication protocol SAFEKeeper ensures maximum security system protection.



Radio Signal Range up to 2000 m

Stable and effective communication with a range of up to 2000 m in open space.



Bidirectional Information Transfer Between Devices

Uninterrupted interaction between the central unit and devices using AES128 encryption.



Up to 12-hour Battery Backup

In the event of a power outage, the Hub 2 Plus LTE - 9-15 DC continues to operate.



65 Users

System management includes - 31× regular user, 1× administrator, 1× integrator and 32× keyboard user.



4 Communication Channels

The Hub has four communication channels: Ethernet, Wi-Fi, 2× GSM/GPRS/LTE.



Cloud Device Firmware Update

Adding new functions, increasing the level of software security and expanding the possibilities of using security systems.



Security Level 2 According to ČSN EN 50131

It represents the highest level of protection for wireless components of the alarm, security and emergency system (PZTS).



Connection of up to 150 Devices

Total capacity of 6 sirens, 64 PIR Motion Cam, 64 remote controls, 8 keypads and 4 signal repeaters.



Jamming Detection

When signal interference is detected, the user is notified and automatically retuned to an undisturbed frequency band.



Support for Integration for Video Surveillance Systems

Supports parallel visual data transmission from Motion Cam motion detectors equipped with an integrated camera.



Tamper Against Sabotage and Unauthorized Manipulation

Protects the device from sabotage or unauthorized manipulation.



Up to 64 Scenarios

Automate your daily routines using custom scenarios.



Free Application

An application that allows you to easily and effectively manage all devices in the SAFE security ecosystem.

Technical specification - Hub 2 Plus LTE - 9-15 V DC

Model Number

SAFE 38300	White version EAN code - 0728204235157
SAFE 38301	Black version EAN code - 0728204235140

Interface

Wireless features	150 channels of wireless peripherals (6 sirens, 64 PIR with camera (only 8 indoor PIR with camera), 64 controllers, 8 keypads and 4 signal repeaters)
Network modes	Ethernet, Wi-Fi and mobile network (supports the installation of two SIM cards. Only one SIM card can be activated at a time)
Network port	1× RJ-45, 10 Mbps / 100 Mbps Ethernet port

Video and Audio

Video inputs	8 channels of IP cameras / NVR (only for sending video sequences in case of alarm)
Video link	Yes
Audio output	1 channel
Volume control	Yes
Voice broadcast	Phone or built-in speaker

Function

LED indicator	1× multi-color (alarm, arm / disarm, connect to cloud, trouble)
Buttons	1× power button / 1× reset button / 1× AP mode button
SMS / Phone call	Yes / Yes (up to 5 phone numbers)
Offline cache	Stores up to 50 alarm messages
Arming and disarming	Application, keypad, keyfob, RFID card, scenario, ext. peripheral input
Remote update	Yes (Cloud)
Tamper contact	Yes (tamper)
User management	33 application users (31 regular users, 1 administrator and 1 technician) and 32 keypad users
Event log	Up to 5,000 records
Transmission protocol	SIA, SoftGuard

Wireless Transmission

Carrier frequency	868.0 MHz – 868.6 MHz
Transmitter power (EIRP)	Limit 25 mW
communication type	Bidirectional
Communication distance	Up to 2,000 m (6561.68 ft) in open space
encryption Mode	AES128
Frequency hopping	Yes (automatic)

System assembly and expansion

The device is ready to operate practically out of the box. It is set up using the ProSAFE mobile application and adding detectors by simply scanning a QR code couldn't be easier. Thanks to the smart mounting brackets and the included fasteners, the assembly itself takes just a few minutes. Thanks to the simple assembly, flexible configuration and wireless communication, the SAFE system is highly modular. Its user can expand or adapt their installation at any time to current needs and changing individual requirements.

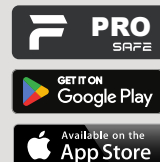
Smart application for smart devices

SAFE brings an intuitive and completely free ProSAFE mobile application, which allows you to easily and efficiently manage all the devices of the security ecosystem. Whether it is videophones, intercoms, IP cameras, recording devices, detectors or automation elements, you have everything under control in one place. The application is designed for smart devices with Android and iOS operating systems and is fully localized into Czech (Slovak, Polish, English, German and Hungarian), which ensures maximum user comfort. Thanks to a clear interface and simple intuitive control, managing your security system is a matter of just a few clicks.

Wireless communication

SAFEKeeper protocol

SAFEKeeper is a radio protocol developed for the SAFE wireless security system. It operates at an operating frequency of 868.0–868.6 MHz and provides long-range communication between system devices up to a distance exceeding 2,000 m in open space without interference. It is protected by AES128 encryption and a two-way communication mechanism, thus ensuring a high level of security of transmitted data. In the event of radio signal interference, it notifies the user of this fact and automatically switches to an uninterruptible frequency band. The device is reliably protected against viruses at the software level. SAFEKeeper underlines the maximum and effective protection of the wireless security system.



Technical specification - Hub 2 Plus LTE - 9-15 V DC

General

Power	Input voltage: 9-15 V DC Output voltage: 9-15 V DC max.1.2 A
Backup battery	Lithium 3.7 V / 4750 mAh, standby time up to 12 hours
Power consumption	≤12 W
Operating temperature	With battery charged: -10 °C to +55 °C (+14 °F to +131 °F) With battery charging: 0 °C to +45 °C (+32 °F to +113 °F)
Operating humidity	10% - 90% (RH)
Storage conditions	Temperature: -10 °C to +55 °C (+14 °F to +131 °F) Humidity: 10% to 90% (RH)
Product dimensions	174.8 mm × 174.8 mm × 38.3 mm (6.88" × 6.88" × 1.51")
Packaging dimensions	254 mm × 210 mm × 60 mm (10" × 8.27" × 2.36")
Weight (net)	510 g (1.12 lb)
Weight (gross)	920.50 g (2.03 lb)
Installation	Wall, desktop
Case material	PC + ABS
Compliance	EN 50131-1:2006+A1:2009+A2:2017+A3:2020 EN 50131-3:2009 EN 50131-6:2017 EN 50131-5-3:2017 EN 50131-10:2014 EN 50136-2:2013 Security level 2 Environmental class II ATS category: SP2 / DP2
Warranty	36 months

Wi-Fi

Wi-Fi standard	IEEE 802.11b/g/n
Wi-Fi frequency range	2400 MHz – 2483.5 MHz
Wi-Fi transmission power	≤20 dBm@2400 – 2483.5 MHz

Mobile Network

Transmitter power (EIRP)	4G: Power class3: 23 dBm ±2 dB 3G: Power class3: 24 dBm +1/-3 dB 2G: Power class0: 30 dBm ±3 dB (GSM900) Power class5: 33 dBm ±3 dB (GSM1800)
Supported networks	GSM/WCDMA/LTE
Frequency range	4G: FDD-LTE: B1/B3/B7/B8/B20/B28; TDD-LTE: B38/B40/B4; 3G: WCDMA: B1/B5/B8; 2G: 1800/900MHz GSM: 1800/900MHz; FDD-LTE: B1/B3/B7/B8/B20/B28A; TDD-LTE: B38/B40/B41; 3G: WCDMA: B1/B8; 2G: GSM: 1800/900MHz

Cloud firmware update

We designed the SAFE security system so that not only the mobile application is updated, but also the firmware of the sub-devices, including the central control unit. The SAFE security system is constantly adapting to modern trends, updating, optimizing and expanding with new system functionalities depending on the development of technologies, requirements or needs of our users. The entire process takes place via encrypted communication, which ensures maximum data protection and integrity. Updates can be performed completely automatically or based on user confirmation.

Protection against interference and sabotage

Hub 2 Plus LTE – DC provides multi-level protection against interference and spoofing attacks – even in the most demanding conditions, whether it is remote locations or moving objects. The system continuously monitors the quality of the radio signal and the connection status of each individual device in the network, where authentication is encrypted during each session. Any attempt to disrupt the SAFEKeeper radio frequency channel is immediately detected, retuned to the backup frequency and reported – regardless of whether the protected object is located tens or hundreds of kilometers away. The Hub is protected against unauthorized manipulation by a tamper contact and, if the power is interrupted for any reason, remains powered by a backup battery for up to 12 hours.

Support for photo verification of alarm events

In the event of a violation, the Hub 2 Plus LTE – DC can cooperate with Motion Cam motion detectors (available for indoor and outdoor use) that have the photo verification function of the alarm and immediately sends images from the detectors to the ProSAFE application or to alarm receiving centers. This means that there is no need to constantly monitor security cameras and in the case of securing indoor areas, 100% privacy protection is guaranteed. For parallel visual data transmission from Motion Cam motion detectors equipped with an integrated camera, the Hub 2 Plus LTE – DC combines Wi-Fi and Ethernet technologies in combination with the SAFE-Keeper radio protocol.

