RG2i
Spécialiste IoT & M2M

100% Made & Designed in Italy

REMOTE ALARM UNIT

2G 4G WI-FI

RG2i
Spécialiste IoT & M2M

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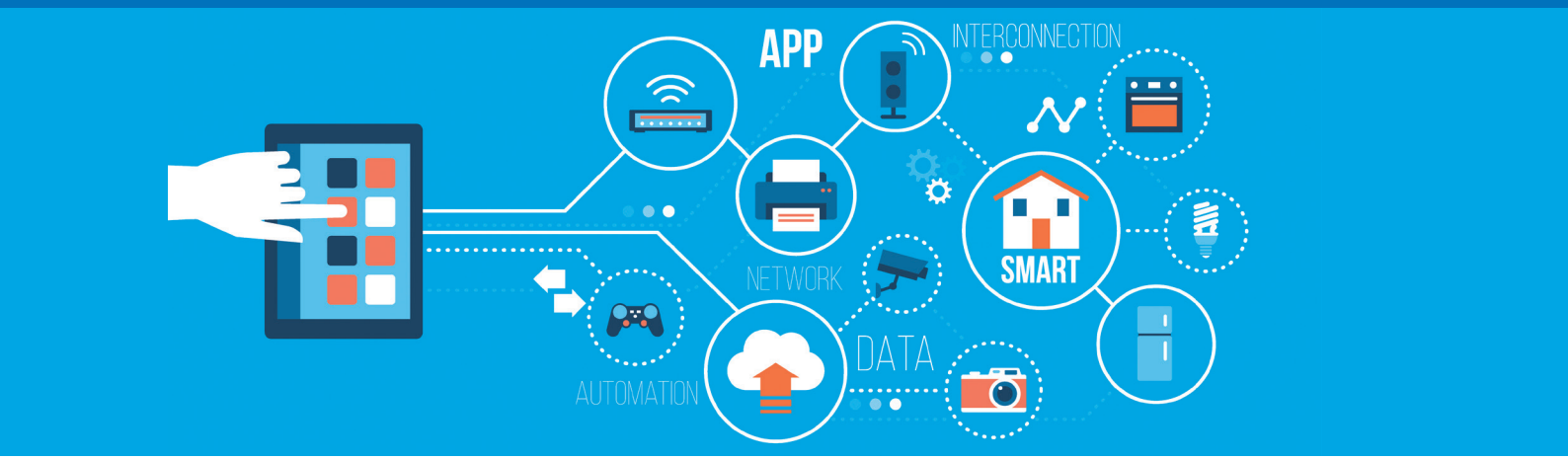
SENECA
www.seneca.it

REMOTE ALARM UNIT



OVERVIEW

SENECA's remote alarm and data collection devices are designed to remotely manage, monitor, and implement small automations for homes, buildings, plants, and production machines through simple commands sent with messages in SMS format or through an app. With any cell phone or smartphone, it is possible to command the switching on and off of a technical system, activate a contact, receive a report of an anomaly or alarm. These professional and universal devices are easily programmable and are based on a 2G (GSM/GPRS) or 4G /LTE or Wi-Fi module that acts as a com- munication system that can intelligently manage calls, commands, address books, and data storage.

THE RANGE

B-ALARM

2G | 1DI 1DO

MYALARM2 BASE

2G | 4DI, 2AI 2DO (opz)

MYALARM2 SECURITY AUDIO

2G | 4G | 4DI, 2AI 2DO (opz) | Audio

MYALARM2 GPS

2G | 4G | 4DI, 2AI 2DO (opz) | GPS | Audio

MyALARM3 Cloud

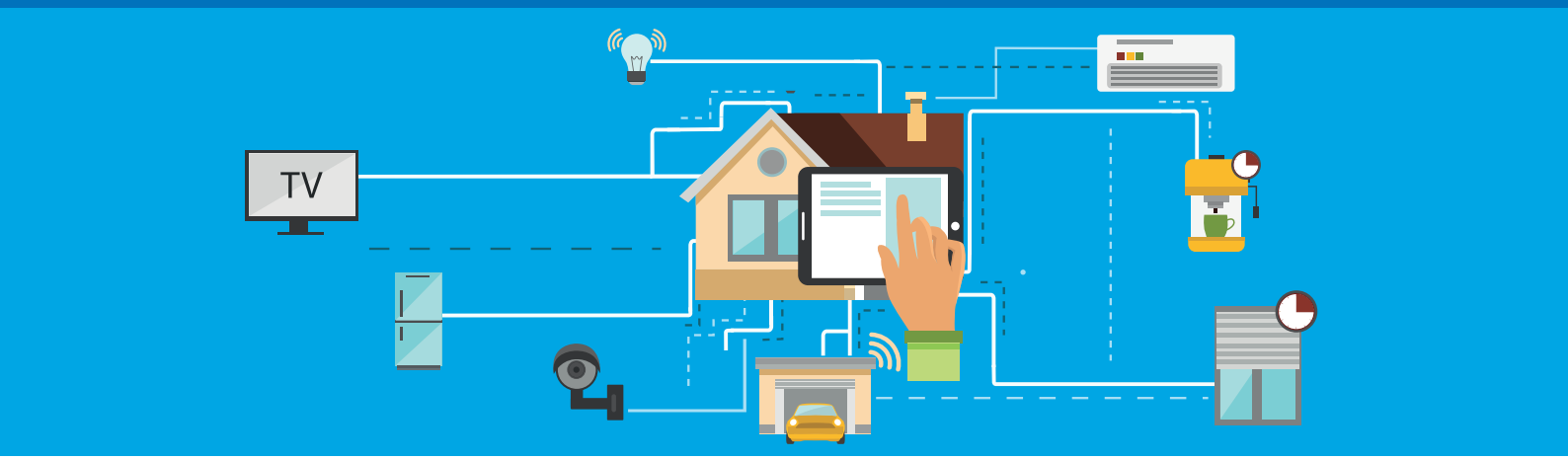
2G | 4DI, 2AI 2DO (opz) | GPS opz. | Cloud

MyALARM3 Cloud W-AIR

Wi-Fi | Cloud | 4DI, 2AI 2DO (opz)

VERSATILITY AND MULTIFUNCTIONALITY

- **Remote control unmanned sites**
- **Flexible configuration**
- **Automatic sending of commands, data, alarms with push notifications / SMS**
- **2G/4G/Wi-FI and integrated I/O**
- **Built-in temperature sensor**
- **Real-time alerts and alarm management**
- **On-off and timed controls for gates, motors, pumps, lights, etc.**
- **Opening / Closing contacts thresholds of temperature (HVAC Systems)**
- **Rechargeable Li-Ion Battery**
- **Optional GPS module**



APPLICATIONS

	B-ALARM	MYALARM2 MY2B	MYALARM2 MY2S	MYALARM2 MY2G	MYALARM3 CLOUD
HOME AUTOMATION & BUILDING					
Universal remote control (for gates, boilers, HVAC systems, etc.)	x	x	x	x	x
Smart thermostat	x	x	x	x	x
Control of lights and lighting systems	x	x	x	x	x
Access and presence control	x	x	x	x	x
Anti-flooding system	x	x	x	x	x
Astronomical twilight switch		x	x	x	x
ENERGY MONITORING					
Mains voltage control and blackout management	x	x	x	x	x
AUTOMATION AND REMOTE CONTROL					
Remote alarm and remote control of systems	x	x	x	x	x
Management of water mains alarms	x	x	x	x	
Photovoltaic system production control (by photodiode)	x	x	x	x	
Fiber optic continuity control	x	x	x	x	
System measurement control (temperature, flow rate, level, etc.)		x	x	x	
Water leak control		x	x	x	
Pump and motor control (logic and hours of operation)		x	x	x	x
Automatic irrigation system		x	x	x	x
Data logger and event recorder		x	x	x	
Cold chain monitoring		x	x	x	
SECURITY					
Telephone dialer			x	x	
DTMF tone commands			x	x	
Automatic sending of commands and alarm push notifications					x
GEOLOCALIZATION					
Geolocalization of machinery, vehicles, boats				x	(x opz.)
Virtual fence control				x	(x opz.)
MOBILE APPS iOS / ANDROID					
Customized applications via widgets					x

REMOTE ALARM UNIT

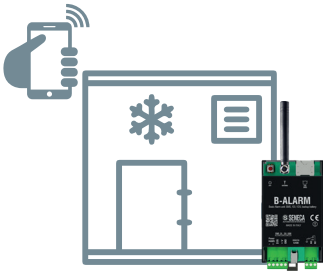
DEPLOYMENT SCENARIOS

AUTOMATIC BARRIER CONTROL

BOILER CONTROL AND HVAC SYSTEMS

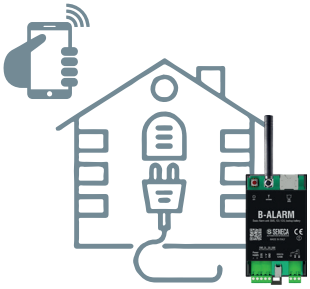
WATER CONSUMPTION AND LEAKAGE CONTROL

SOLAR PANEL CONTROL

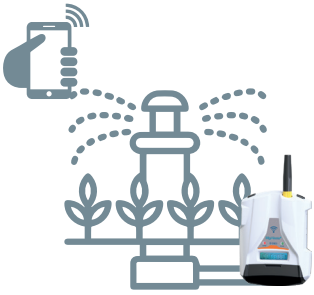


SOLAR PANEL CONTROL

MAINS VOLTAGE CONTROL



AUTOMATIC IRRIGATION SYSTEMS

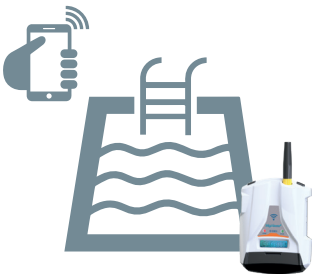


VEHICLE AND FLEET TRACKING

ANTI-FLOODING SYSTEMS

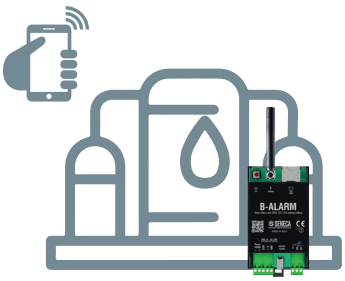
LIGHTS CONTROL.

SWIMMING POOL CONTROL

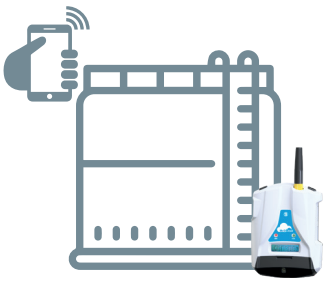


ACCESS CONTROL

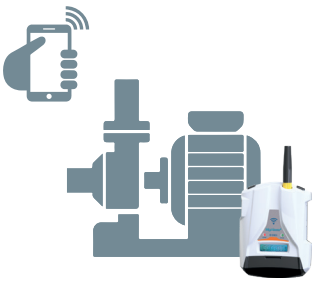
REMOTE CONTROL PLANT MEASUREMENTS



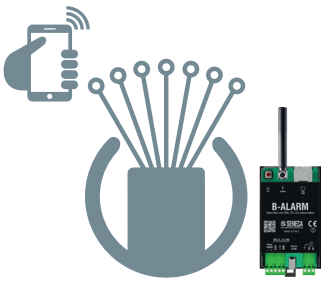
PLANT ALARM MANAGEMENT



PUMP AND MOTOR CONTROL



FIBER OPTIC CONTINUITY CHECK



CONFIGURATION AND PROGRAMMING

			B-ALARM	MYALARM2	MYALARM3 CLOUD
EASY SETUP		I/O management, acquisition time, log (MYALARM2 only), commands, alarms, SIM, GSM communication, audio files (MYALARM2 only), administration functions (password, credit, message redirection, etc.).	✓	✓	
SMS COMMANDS		Up to 16 different “fast” commands can be defined and selected from the list of actions. With some smartphones, SMS messages are sent with UNICODE characters instead of using the GSM alphabet.	✓	✓	
RING		In case the unit is equipped with voice-type SIM CARD, it is possible to have “no-cost” operations performed by sending rings in response to which the units can perform will perform certain configured operations	✓	✓	
SENECA SMS		With the iOS/Android Seneca SMS app, you can manage remote alarm units and dataloggers equipped with a GSM interface through simple SMS. The application allows you to edit i predefined templates and always with extreme ease to add one or more editable commands.	✓	✓	
MY3 CLOUD (APP)		MyALARM3 Cloud app offers high levels of parameterization. It allows, for example, to easily set critical times for the system. The app also guides the user in interface customization.			✓

B-ALARM
Basic Alarm Unit

DO YOU WANT TO KNOW MORE?

B-ALARM is a GSM device designed for remote alarm management of homes, buildings, plants, production machines through simple commands sent with messages in SMS format. With any smartphone it is possible to command the switching on and off of the boiler, activate a contact, etc. The device is equipped internally with a GSM module that behaves like any telephone terminal on a cellular network. The unit allows to operate with zero-cost commands by ringing as well as fast commands with numeric and timed code. It also has 1 digital input and 1 SPDT output relay with a capacity of 3 A / 250 Vac. B-ALARM can rely on a command book of 5 users and an extended SIM phone book of up to 250 users.

HIGHLIGHTS

- INSTANT ALERT MESSAGING
- UNICODE MULTILINGUAL SUPPORT
- INTEGRATED MODEM AND I/O
- TEXTING / RINGING COMMANDS AT NO COST
- ADDRESS BOOK FOR UP TO 250 USERS PER APPLICATION
- RECHARGEABLE LI-ON BATTERY
- COMPATIBILITY WITH ALL STANDARD VOICE/DATA SIM TYPES
- METER AND TIMER MANAGEMENT

Power off button

SMA antenna connector

No.1 Slot push pull
for mini SIM card

Wall mounting or on DIN rail - CEI EN 60715

Status LED

GSM quad band
850 / 900 / 1800 /1900 MHz

10..28 Vdc power supply
NiMh rechargeable buffer battery 600 mAh, max autonomy 1 h

No.1 digital relay output
SPDT 2A – 250V

No.1 digital reed input
Reed, contact, NPN / PNP 2 wires, FD01 5Hz

Micro USB
for upgrade and configuration

MYALARM2
A concentration of technologies

DO YOU WANT TO KNOW MORE?

MyALARM2 BASE (MY2B) is a 2G (GSM/GPRS) or 4G /LTE device designed to remotely control homes, buildings, plants, production machines through simple commands sent with messages in SMS format. The device is also capable of sending alarms, SMS/email in case of anomalies on inputs, power failure, exceeding tem- perature thresholds. It also ensures recording on MicroSD of all variables and sending log files via email or ftp. MyALARM2 SECURITY AUDIO (MY2S) is also capable of sending voice calls and receiving commands via DTMF tones, including silencing alarms. The MyALARM2 GPS (MY2G) version integrates some geolocation functions and allows setting alarms on virtual fence and speed.

QUICK SELECTION

	MYALARM2 - MY2B	MYALARM2 - MY2S	MYALARM2 - MY2G
SD included	No	Yes	Yes
Integrated NTC sensor	Yes , External optional	Yes , External optional	Yes , External optional
I/O	4DI, 2AI, 2DO (optional)	4DI, 2AI, 2DO (optional)	4DI, 2AI, 2DO (optional)
Communication	GSM/GPRS	GSM/GPRS or 4G/LTE	GSM/GPRS or 4G/LTE
Integrated GPS	No	No	Yes
Data logger	Yes	Yes	Yes
Preset scenarios	Yes	Yes	Yes
DTMF commands / Voice alarms	No	Yes	Yes
Email management	Yes	Yes	Yes
Address book	20 SMS contacts, 20 e-mail contacts, 1000 ring command contacts	20 SMS contacts, 20 e-mail contacts, 1000 ring command contacts	20 SMS contacts, 20 e-mail contacts, 1000 ring command contacts

2G (GSM/GPRS) or 4G /LTE communication

GSM/GPRS Quadband 850/900/1800/1900 MHz integrated modem, 4G / LTE-FDD B1/B3/B5/B7/B8/B20

Power button

Mini USB interface of rapid programming

GPS Module (My2G version)

Receiver 22 channels, -165 dBm, fix time 32s, accuracy up to 2.5m

LCD Display

128 x 32 pixel LCD display for I/O status display, totalizers / counters, GSM, date

Data acquisition

#4 Digital Inputs:li: Freq. Max 30 Hz @ 32 bit [10 timer, 4 counters, 4 totalizers, 4 hour meters]
#2 Analog Inputs: Range (0-20 mA, 0-30 V), 16 bit resolution
#2 Digital Outputs: SPST relay 3 A (optional).

Compact size

MyALARM2: 80 x 105 x 30 mm
IP66 housing (MY2-KITIP66): 130 x 180 x 75 mm

"SCROLL DISPLAY" button

Data/Voice SIM Port

Built-in and expandable SD memory

Micro SD slot and microSDHC up to 32 GB Built-in flash memory

Rechargeable buffer battery

(Li-On, 1,000 mAh, max. autonomy 8 h)

12 V power supply

NTC sensor

wired on terminal

MYALARM3 CLOUD
The Cloud at your fingertips

DO YOU WANT TO KNOW MORE?

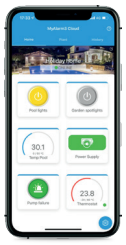
MyAlarm3 Cloud is a system consisting of a GSM/GPRS or 4G/LTE or Wi-FI intelligent control unit and a mobile app for remote control of homes, plants, machinery and unmanned installations. MyAlarm3 Cloud is a compact and reliable all-in-one system for residential or industrial applications, especially for automatic data and alarm sending from unmanned sites. The app offers the main functions useful for monitoring through immediate consultation and convenient use from both Web browsers and mobile devices, enabling alarm management (in case of blackout, digital contact varia- tion, analog input and temperature thresholds exceeded), timed, impulsive and on/off commands (lights, motors, gates, pumps, overhead, HVAC system contacts and twilight contacts), GPS (location notifications, virtual fence alarm).

CONFIGURAZIONE DI SISTEMA

1. CENTRAL BOX.

GSM/ GPRS monitoring unit including 4 digital inputs, 2 analog inputs, 2 digital outputs (optional), LCD display, tempe- rature sensor, input for external NTC sensor, battery, GPS module (optional).

2. APP iOS / ANDROID



Free MyALARM3 Cloud mobile app available on Apple or Play strore. This powerful app in 10 languages advanced system configuration easy. It integrates tutorials, ma- nuals and online help.

3. CLOUD SERVICE.

Included in the MyAlarm3 Cloud Kit is a 12-month fee from the date of first activation. For infor- mation and service renewal fees, please visit:
www.seneca.it/myalarm3cloud
https://cloud.seneca.it

Antenna and Wi-Fi module
Alternatively of GMS/GPRS module antenna.

Power button

Mini USB interface of rapid programming

LCD display
128 x 32 Dots (displaying status, I/O, battery level, GSM)

GSM/GPRS antenna and module

"Scroll display" button

Internal GPS module
(Optional))

SIM voice/data slot

SD Memory card

Rechargeable Li-Io battery,
3.7 V -1100 mAh, autonomy up to 5 h

Power supply 12 V

Power cable
on 230V power outlet

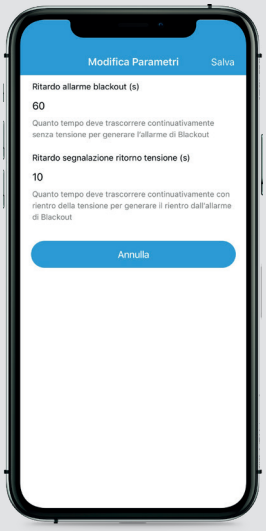
NTC temperature probe 5 cm

Integrated I/O terminals
- 4 digital inputs REED Contact, PNP, Pulscap, relay (max. frequency 30Hz)
- 2 analog inputs Current 0..20 mA, 0..30 V; 16-bit resolution; Accuracy 0.1% f.s.
- 2 digital outputs SPST relay 3 A / 250 Vac (Optional

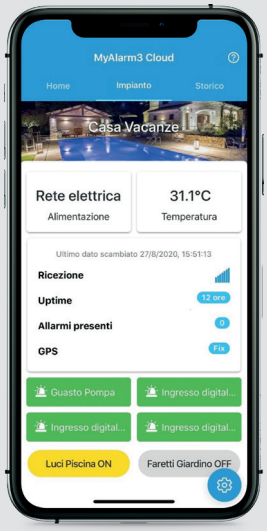
IP66 outdoor housing
(Optional))

MYALARM3 CLOUD
The most powerful and easy app for plant monitoring

ADVANCED CONFIGURATION

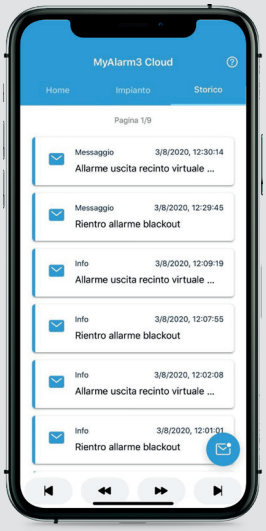


ALARM AND COMMAND MANAGEMENT

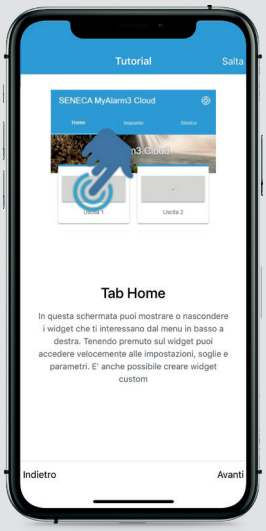


GEOLOCATION

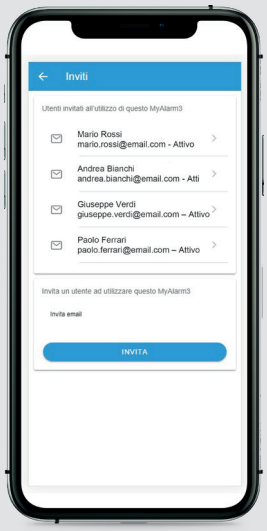
ALARM AND EVENT HISTORY



TUTORIALS AND ONLINE SUPPORT

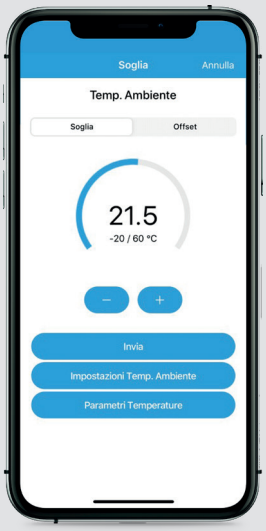


DEVICE AND INVITATION MANAGEMENT



CALENDAR AND SCHEDULES

FUNCTION



REMOTE ALARM UNIT

TECHNICAL DATA

	B-ALARM	MYALARM2 MY2B	MYALARM MY2S	MYALARM2 MY2G	MYALARM3 CLOUD	MYALARM3 CLOUD W-AIR
	Remote alarm unit 2G, 1DI, 1DO with basic functions	**Remote alarm unit 2G (4G), 4DI, 2AI 2DO (opt), basic version**	**Remote alarm unit 2G (4G), 4DI, 2AI 2DO (opt), security audio version**	**Remote alarm unit 2G (4G), 4DI, 2AI 2DO (opt), GPS version**	**Remote alarm unit 2G (4G), 4DI, 2AI 2DO, remote control, app based**	**Wi-Fi remote alarm unit, 4DI, 2AI 2DO, remote control, app based**
GENERAL DATA						
Power supply	10 - 30 Vdc	6-15 Vdc				
Max power consumption	2 W	3,5 W				
Protection degree	IP20					
Rechargeable battery	Ni-MH, 600 mAh, up to 100 min of battery life	Li-ION (1,100 mAh), autonomy up to 8 hours (without auxiliary relay)				
SD support	-	Push-Push per SD card e SD HC card / max 32GB				
SIM slot	Push-Push per mini SIM (15 x 25 mm)					-
Supported SIMs	Mini SIM					-
Temperature probe	-	Internal NTC thermistor (standard), external optional				
Protocols	SMS	FTP client, SMTP client, SMTPS with SSL client			MQTT	
Display	-	LCD 128x32 Dots con area visibile 39 mm x 8,6 mm				
		Display scroll button				
Modem 2G	Quad band (850 / 900 / 1800 / 1900 MHz)					-
Modem 4G	-		LTE-FDD B1/B3/B5/B7/B8/B20 o GSM/GPRS/EDGE 900/1800 MHz			-
Wi-Fi	-					2,4GHz (802.11b/g/n; Up to 150Mbps)
GPS	-			RECEIVER 22 channels SENSITIVITY -165 dBm FIX TIME 32 s typical ACCURACY Up to 2.5 m	OPTIONAL RECEIVER 22-channel SENSITIVITY -165 dBm FIX TIME 32 s typical ACCURACY Up to 2.5 m	-
Connections	Spring clips (3.5 mm pitch) Micro USB SMA connector					
			MMCX connector			-
Dimension	114x54x32 mm	80 x 105 x 30 mm				
Weight	80 g	150 g				
Operating temperature	-10..+55°C	0..45°C (recommended) -20..+55°C (charging) -20..+45°C (discharging)				
Material	ABS polycarbonate					
Installation	DIN guide or wall mount					
Approvals	CE, UKCA					
FUNCTIONS AND SETTINGS						
Datalogger	-	Sì			-	
Basic configuration	Software (EASY SETUP), SMS commands, ringtones	Software (EASY SETUP, EASY MYALARM2), SMS commands, ringtones			Web or Mobile App (MyALARM3 CLOUD)	
Management app	-	SENECA SMS			MyALARM3 Cloud	
Cloud service					12 mesi gratuiti dall'attivazione	
Scenario management / widgets		Advanced automation, input alarms, data loggers, leak control, solar panel control, swimming pool control, automatic gate control, timed automation, hour meters, boiler control, blackout control			Electricity grid, temperature, 2G/4G/Wi-Fi network, GPS, actve alarms, uptime, I/O management, analog threshold MAX/MIN, counter threshold, digital input/output, GPS fence, electricity grid absence, sunrise and sunset, temperature MIN/MAX, free command	
Controls and alarms	Fast and time-controlled (SMS) controls via ringtone, SMS alarms		Fast and time-controlled (SMS) commands via ringtone, DTMF, SMS or voice		Push alarms via App	
Email management	-	Sì			-	
History	-				Log allarmi, eventi, calendario	
Address book	5 users (1 administrator), 250 contacts (with call control)	20 users (multi-administrator), 1000 contacts (per ring command)			-	
Counters / Timers	1 counter/totalizer	4 countes / totalizers, 10 timers			4 countes / totalizers, 10 timers	
DIGITAL INPUTS						
Channels	1	4				
Type	Contact, voltage 6-24 V	Reed, Contact, PNP, Pulscap				
Max. frequency	-	30 Hz				
ANALOGUE INPUTS						
Channels	-	2				
Type	-	Current 0..20 mA (max. impedance 60 Ω voltage 0..30 V (max. impedance 100 kΩ				
Resolution	-	16 bit				
Accuracy	-	0,1% f.s.				
DIGITAL OUTPUTS						
Canali	1	2 (option)			2	
Tipo	SPDT Relay 3 A / 250 Vac	SPST Relay 3 A / 250 Vac				

I dati tecnici e gli schemi su questo documento sono indicativi e non vincolanti.

SALES CONFIGURATION

B-ALARM

- 10..28Vdc power supply
- NiMh buffer battery 600 mAh
- No. 1 digital reed input, contact, NPN / PNP 2 wires, FD01 5Hz
- No. 1 digital relay output SPDT 2A - 250V
- No. 1 Micro USB port
- No. 1 quad band GSM modem

ORDER CODES

Codici	Description
B-ALARM	Basic Alarm Unit, 1DI,1DO, SMS, battery backup

MYALARM2

- 12V power supply
- Li-On battery, 1,000 mAh, max autonomy 8 h
- No. 4 Digital Inputs: Freq. Max 30 Hz @ 32 bit
- No. 10 timers, 4 counters, 4 totalizers, 4 hour counters
- No. 2 Analog Inputs: Range (0-20 mA, 0-30 V), 16 bit resolution
- No. 2 Digital Outputs: SPST Relay 3 A (optional)
- No. 1 Micro USB port
- No. 1 2G/4G modem, optional GPS

ORDER CODES

Versions / Options	Codes	Description
Basic unit	MY2B	MYALARM2 BASE / DATALOGGER
	MY2S	MYALARM2 SECURITY AUDIO
	MY2G	MYALARM2 GPS
Modem	L	4G / LTE (solo per versioni MY2G e MYS)
SPST Relay Board	-0	Absent
	-R	Present
Arrangement of other connections	-0	Absent
Linking system	-C	Connectors
	-M	Clamps
Colors	-B	Blue
	-G	Gray
IP66 housing (option)	-4X	IP66 housing, electrically insulated, with opening front door

MYALARM3 CLOUD

- 12 V power supply
- Rechargeable battery 1100 mAh, autonomy up to 5h
- No.4 digital inputs REED Contact, PNP, Pulscap, relay
- No.2 analog inputs Current 0..20 mA, 0..30 V;
- 16-bit resolution; Accuracy 0.1% f.s.
- No.2 digital outputs SPST relay 3 A / 250 Vac (optional).
- GSM/GPRS or Wi-Fi communication
- Optional GPS

ORDER CODES

Codes	Description
MY3C-1Y	Cloud Service Renewal 12 Months MyAlarm3 Cloud
MY3CLOUD-APP	Cloud Service Renewal 12 Months MyAlarm3 Cloud
MY3CLOUD-R-0-0-G	Cloud support remote alarm unit, relay, gray color
MY3CLOUD-R-0-G-G	Cloud support remote alarm unit, relay, GPS, gray color
MY3W-AIR-R-0-G	Cloud support remote alarm unit, relay, Wi-Fi, gray color

ACCESSORIES

Code	Description	Code	Description
A-GPS	External GPS antenna with magnetic base and MMCX connector	ALIM-MY2	Spare power supply
A-GSM	External multiband antenna with 3 m cable and SMA male connector	BATT-MY2	3.7V - 1,200mAh lithium battery for MYALARM2
A-GSM-DIR-5M	Compact directional GSM-UMTS antenna	BATT-GP80	Spare battery for B-ALARM
A-GSM-OMNiDIR	Omnidirectional GSM-UMTS-WIFI antenna	FD01	PULSECAP, photodetector for pulse counting, max. frequency 10 Hz
A-GSM-OMNiDIR-10	Omnidirectional GSM-UMTS-WIFI antenna with 10 m cable length CU-A-MICRO-B USB-A to Micro USB-B 5 P cable	MSD	MicroSD card with SD adapter
A-GSM-QUAD-N	External omnidirectional 4G/WI-FI antenna, FME, 3 m cable	MY2-KITIP66	ABS IP66 kit for quick field assembly
ANT-WIFI-MP	WiFi 2.4/5.0 Ghz “Blade”, Black, Connector Mount, SMA Male	MY3C-1Y	12-month Cloud Service renewal MyAlarm3 Cloud
ANTENNA-ST-4G	SMA Male straight antenna Black - 4G - LTE	NTC-150	External NTC probe 1.5 m
ANTENNA-STILO-MY2	Straight GSM antenna SMA-M nickel-plated		
A-SCR-90	Antenna/spare part with 90° screw mount on SMA connector		