

GAT NET.Controller 7020

Controller for the GAT NET.Lock 7020

FACTS AT A GLANCE

- All popular RFID technologies (13.56 MHz and 125 kHz) supported - LEGIC, MIFARE®, ISO 15693, HID iCLASS®
- Two controller types for up to 12 or 24 locks per controller
- Stand-alone mode supported
- Connection of locks via industry-standard MOLEX plugs
- LED status display
- Simple integration into Relaxx locker management software
- Firmware update via host interface possible
- Diagnostic system for detecting lock problems
- Integration into alarm system (locker break-in alarm)
- Robust housing also suitable for wall mounting



The GAT NET.Controller M 7020 (main controller) and GAT NET.Controller S 7020 (sub controller) units are used to connect and control the latest generation of innovative electronic locker locks - the GAT NET.Lock 7020.

The controllers can operate in online or stand-alone mode. In online mode, the controllers communicate with a host PC/server. The main controller serves as the communication bridge between the host PC/server and the sub controllers. In stand-alone mode, a main controller is not needed; the sub controller and connected locks operate autonomously according to their configuration.

Flexibility is ensured by the different sub controller models that support two RFID frequencies (13.56 MHz and 125 kHz) and all popular technologies (LEGIC, MIFARE®, ISO 15693, and HID iCLASS®).

Each main controller can control up to 8 sub controllers and 192 locks over a maximum cable length of 800 m. To reduce costs and complexity for smaller MIFARE®/ISO systems, a light version of the sub and main controllers is available.

GAT NET.Controller M 7020



GAT NET.Controller M 7020 Light



In online operation, the sub controllers receive data carrier information via the connected locks. This data is sent via the main controller to the PC/server for authorization. The current status of the locker system is also forwarded to the PC/server thereby allowing the status of each locker to be visualized on a PC using Relaxx software. An emergency mode function for online mode ensures that operation continues if communication to the PC/server is interrupted.

In stand-alone operation, the GAT NET.Lock 7020 locks operate similar to the Gantner battery locks. Lock configuration is possible using GAT Config Manager software or via wireless communication at the locks (e.g., via the MoLA app or configuration data carriers).

GAT NET.Controller S 7020 F/ISO
GAT NET.Controller S 7020 BA
GAT NET.Controller S 7020 ICLS



GAT NET.Controller S 7020 F/ISO Light



Order information

Description	Part No.
GAT NET.Controller M 7020 Main controller for controlling max. 8 GAT NET.Controller S 7020 sub controllers.	1100399
GAT NET.Controller M 7020 Light Main controller for controlling max. 3 GAT NET.Controller S 7020 sub controllers.	1100398
GAT NET.Controller S 7020 F/ISO Sub controller for max. 24 GAT NET.Lock 7020 locks with and without USB. For MIFARE®, ISO 15693 and proxy 125 kHz data carriers.	1100388
GAT NET.Controller S 7020 F/ISO light Sub controller for max. 12 GAT NET.Lock 7020 locks with and without USB. For MIFARE®, ISO 15693 and proxy 125 kHz data carriers.	1100389
GAT NET.Controller S 7020 BA Sub controller for max. 24 GAT NET.Lock 7020 locks with and without USB. For MIFARE®, ISO 15693, LEGIC and proxy 125 kHz data carriers.	1100387
GAT NET.Controller S 7020 ICLS Sub controller for max. 24 GAT NET.Lock 7020 locks with and without USB. For MIFARE®, ISO 15693, HID iCLASS® & Seos - PACS and proxy 125 kHz data carriers.	1100390
GAT NET.Power Supply 7020-1 100-240V / VI Power supply for the sub and main controllers. Output: 24 V DC / 1.66 A LPS.	1104784
GAT NET.Power Supply 7020 USB 100-240 V / VI Power supply unit for the main and sub controllers. Type "USB" for the GAT NET.Lock 7020 with USB.	1100052
Power Cord EU CH – IEC 60320 C7	494181
Power Cord UK – IEC 60320 C7	494282
Power Cord USA – IEC 60320 C7 1.8m power cord with country-specific mains plug, black, suitable for the GAT NET.Power Supply 7020 with C8 power socket.	636835
Power Cord EU – IEC 60320 C13	495624
Power Cord CH – IEC 60320 C13	499123
Power Cord UK – IEC 60320 C13	499022
Power Cord USA – IEC 60320 C13 1.8m power cord with country-specific mains plug, black, suitable for the GAT NET.Power Supply 7020 with C13 power socket.	270615
GAT NET.Controller S Interface Cable USB 5 m USB - RS-485 interface cable for the GAT NET.Controller S in stand-alone mode. NOTE: This cable is only required for stand-alone configuration with GAT Config Manager.	1102316
A complete list of accessories can be found in the "GAT NET.Lock 7020 Ordering Guide".	

Controller functionality table

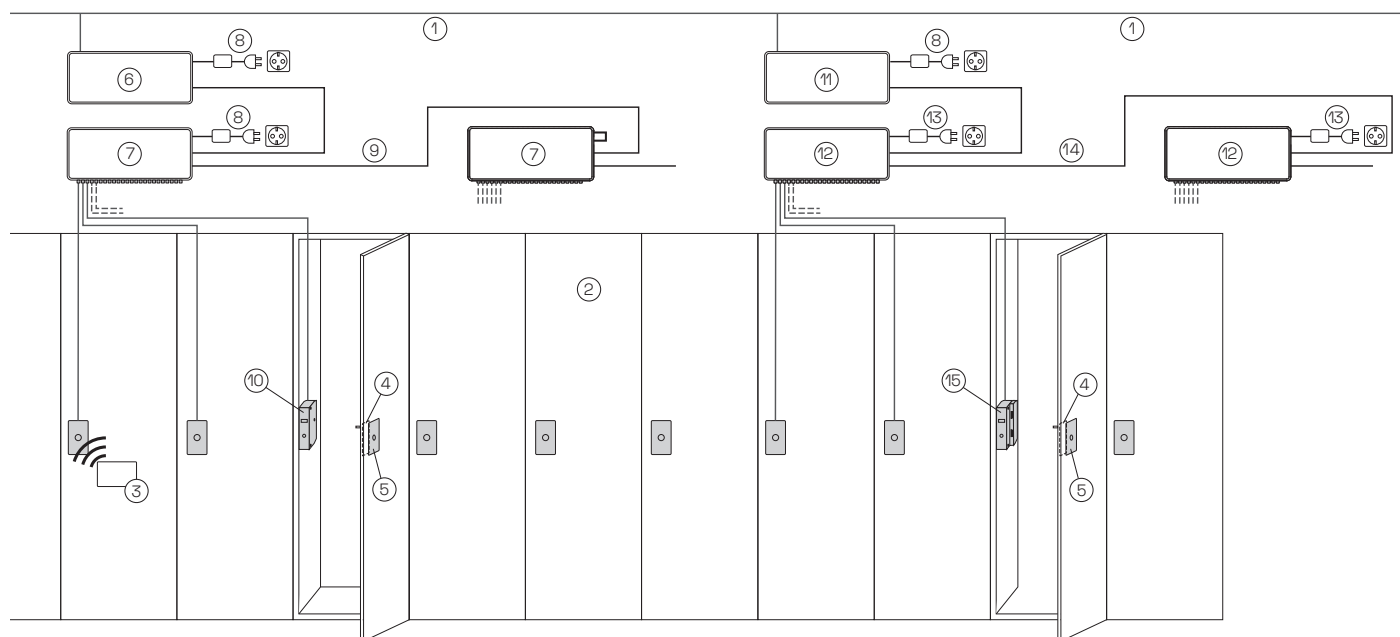
For smaller MIFARE®/ISO systems, a light version of the sub and main controllers is available. The following table shows the functionality of each controller. For LEGIC and HID iCLASS® systems, only the full functionality controllers are available.

Functionality	Main	Main Light	Sub	Sub Light
Number of relays	4	0	-	-
Number of optocouplers	4	0	-	-
Max. no. of sub controllers	8	3 ⁽¹⁾	-	-
Max. no. of NET.Locks	192 (via sub controllers)	72 ⁽²⁾ (via sub controllers)	24	12

(1) Expandable to 8 with additional license (Part No. 978440)

(2) The "Sub Light" controllers (max. 3 x 12 = 36 NET.Locks) as well as "Sub" controllers (max. 3 x 24 = 72 NET.Locks) can be connected.

Typical application



- 1 LAN network
- 2 Lockers
- 3 RFID data carrier
- 4 Bolt set (GAT NET.Lock BoltSet 7xxx)
- 5 Front label

Different variants of GAT NET.Lock locks and controllers can operate in combination:

- 6 Main controller 7020 or 7000
- 7 Sub controller 7020 or 7000
- 8 GAT NET.Power Supply 7020 (without „USB“) or 7000
- 9 RS-485 + power
- 10 ..GAT NET.Lock 7020 / 7020 P or GAT NET.Lock 7000

To use the USB and LED function, the GAT NET.Lock 7020 USB (P) and the following combination of controllers and power supplies must be used:

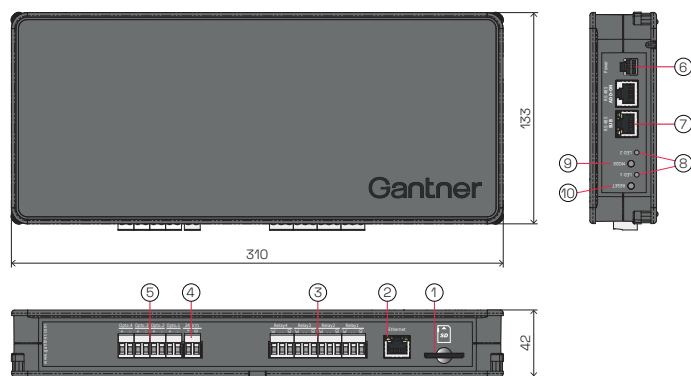
- 11 ...Main controller 7020 or 7000
- 12 ..Sub controller 7020
- 13 ..GAT NET.Power Supply 7020 USB
- 14 ..RS-485 (without direct power, each sub controller needs its own USB type power supply)
- 15 ..GAT NET.Lock 7020 USB or 7020 USB P

Technical data

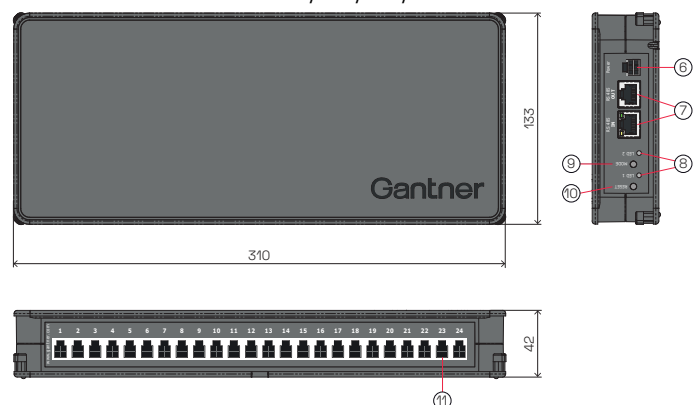
Nominal voltage	DC 24 V
Power supply	External power supply
- for GAT NET.Lock 7020	GAT NET.Power Supply 7020-1 100-240V / VI
- for GAT NET.Lock 7020 USB	GAT NET.Power Supply 7020 USB 100-240V / VI
Average power consumption	typ. 3 W
Reader types	
- S 7020 F/ISO (light)	MIFARE® + ISO 15693 + HID iCLASS® - CSN (UID)
- S 7020 BA	MIFARE® + ISO 15693 + LEGIC prime & advant + HID iCLASS® - CSN (UID)
- S 7020 ICLS	MIFARE® + ISO 15693 + HID iCLASS® & Seos - PACS Data
Memory (main controller)	- Internal memory for 10,000 bookings - SD card slot for memory expansion, log files, firmware update or user lists
Weight	Approx. 600 g (21.16 oz)
Permitted ambient temperature	0 °C to 60 °C (32 °F to 140 °F)
Protection type	IP40
Protection class	I
Environment class (VdS 2110)	II (conditions in indoor areas)
Certification	CE, FCC

Device features and dimensions

GAT NET.Controller M 7020



GAT NET.Controller S 7020 F/ISO / BA / ICLS



GAT NET.Controller M 7020 Light



GAT NET.Controller S 7020 F/ISO Light



- 1 SD card input
- 2 Ethernet
- 3 Relay outputs
- 4 DC 24 V output
- 5 Optocoupler inputs
- 6 Power supply input
- 7 RS-485 in/out
- 8 Status LEDs
- 9 MODE button
- 10....RESET button
- 11....GAT NET.Lock 7020 connection

Dimensions in mm