# Gantner

## **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
- Standalone mode supported
- Connection of locks via industry-standard MOLEX plugs
- LED status display
- Simple integration into GAT 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 (master controller) and GAT NET. Controller S 7020 (sub controller) units are used to connect and control GANTNER's latest generation of innovative electronic locker locks - the GAT NET.Lock 7020.

The controllers can operate in online or standalone mode. In online mode, the controllers communicate with a host PC/server. The master controller serves as the communication bridge between the host PC/ server and the sub controllers. In standalone mode, a master 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 master 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 master controllers is available.



**GAT NET.Controller M 7020** 



**GAT NET.Controller S 7020** 























In online operation, the sub controllers receive data carrier information via the connected locks. This data is sent via the master 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 via PC software such as GAT Relaxx. An emergency mode function for online mode ensures that operation continues if communication to the PC/server is interrupted.

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

### Order Information & Accessories

Description	Part No.
GAT NET.Controller M 7020	1100399
Master controller for controlling max. 8 GAT NET.Controller S 7020 sub controllers.  GAT NET.Controller M 7020 Light	1100398
Master controller for controlling max. 3 GAT NET.Controller S 7020 sub controllers.	1100090
GAT NET.Controller S 7020 F/ISO	1100388
Sub controller for max. 24 GAT NET.Lock 7010, GAT NET.Lock 7020 with and without USB, for	1100300
MIFARE®, ISO 15693, and proxy 125 kHz data carriers.	
GAT NET.Controller S 7020 F/ISO Light	1100389
Sub controller for max. 12 GAT NET.Lock 7010, GAT NET.Lock 7020 with and without USB, for	
MIFARE®, ISO 15693, and proxy 125 kHz data carriers.  GAT NET.Controller S 7020 BA	1100387
Sub controller for max. 24 GAT NET.Lock 7010, GAT NET.Lock 7020 with and without USB, for LEGIC	
advant and proxy 125 kHz data carriers.	
GAT NET.Controller S 7020 ICLS Sub controller for max. 24 GAT NET.Lock 7010, GAT NET.Lock 7020 with and without USB, for HID	1100390
iCLASS® and proxy 125 kHz data carriers.	
GAT NET.Power Supply 7020 100-240V / VI	1100051
Power supply unit for the master and sub controllers.	
GAT NET.Power Supply 7020 USB 100-240 V / VI	1100052
Power supply unit for the master and sub controllers. Type "USB" for the GAT NET.Lock 7020 with USB.	
GAT NET.Lock 7020	1100394
GAT NET.Lock 7020 P	1100391
GAT NET.Lock 7020 USB	1100393
GAT NET.Lock 7020 USB P Electronic RFID locker lock.	1100392
P = additional 125 kHz proxy reader, USB = 2 x USB ports and LED locker lighting.	
GAT NET.Controller S Interface Cable USB	1102316
5 m USB - RS-485 interface cable for the GAT NET.Controller S in standalone mode.	1102310
NOTE: This cable is only required for standalone configuration with GAT Config Manager.	
NOTE: For a complete list of accessories refer to the CAT NETL - 1: 7000	
NOTE: For a complete list of accessories, refer to the GAT NET.Lock 7020 manual.	



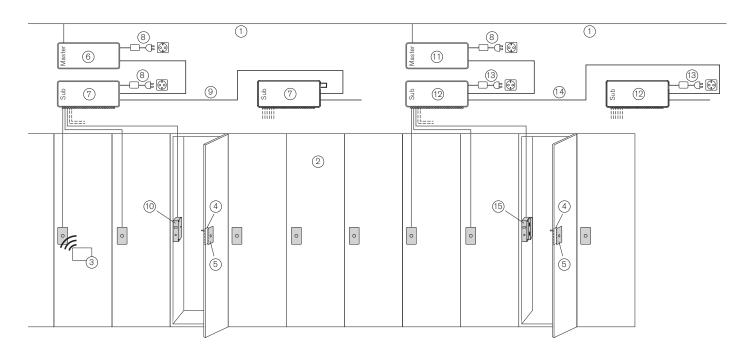
## Controller Functionality Table

For smaller MIFARE®/ISO systems, a Light version of the sub and master 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	Master	Master Light	Sub	Sub Light
Number of relays	4	0	-	-
Number of optocouplers	4	0	-	-
Max. no. of sub controllers	8	3*	-	-
Max. no. of NET.Locks	192	72**	24	12
	(via sub controllers)	(via sub controllers)		

<sup>\*</sup> Expandable to 8 with additional license (Part No. 978440)

## 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 ..... Master controller 7020 or 7000
- 7 ..... Sub controller 7020 or 7000
- 8 ......GAT NET.Power Supply 7020 (without "USB") oder 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 ... Master 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

<sup>\*\*</sup> It is possible to connect the Sub Light controllers (max. 3 x 12 = 36 NET.Locks) as well as Sub controllers (max. 3 x 24 = 72 NET.Locks)



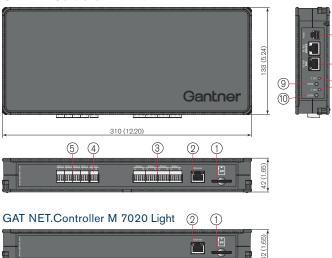
### Technical Data

Nominal voltage:	DC 24 V		
Power supply	External power supply		
- GAT NET.Lock 7020	GAT NET.Power Supply 7020 100-240V / VI		
- 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		
- S 7020 BA:	LEGIC advant		
- S 7020 ICLS:	iCLASS®		
Memory (master controller):	- Internal memory for 10,000 bookings		
	<ul> <li>SD card slot for memory expansion, log files, firmware update or user lists</li> </ul>		
Weight:	Approx. 600 g (21.16 oz)		
Permitted ambient temperature:	0 °C to 60 °C (32 °F to 140 °F)		
Protection type:	IP 40		
Protection class:	l		
Environment class (VdS 2110):	II (conditions in indoor areas)		
Compliance:	CE, FCC		

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## Device Features and Dimensions





#### GAT NET.Controller S 7020





- 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

Measurements in mm Inches in brackets