



WURM GATEWAYS PERFORM BETTER

The Multigate 3 enhances
the gateway family



STRONG FAMILY WITH A LARGE PERFORMANCE SPECTRUM

Conventional gateways usually focus on transporting protocols of an interface to another and, at most, transforming them to the data structure of the recipient. What they all have in common is that they do not understand anything of the application – hence, they are not “smart.”

In comparison, the gateways by Wurm offer much more. As “gatekeepers”, they do not let anything unaudited pass. At the same time, they monitor safe plant operation as “supervisors”. As “data managers”, in turn, they manage and organise large data volumes. And finally, they interpret data for other interested parties as “translators”.

As “a gatekeeper”, a Wurm gateway is responsible for access control. A whole set of security measures effectively prevents the access of unauthorised persons. This begins with the examination of the correct plant ID number and a password assigned to the corresponding section. Each password is unique in its complexity and individually assigned ex works. Additionally, a “fingerprint” is saved in the gateway for traceability back to the user. Only after passing all security levels is access to the plant possible.

Wurm gateways distinguish the different responsibilities in refrigeration or building technology systems for three sections. As intelligent “supervisors”, they identify mal-

functions in a system and send an alarm message. If a control device cannot communicate anymore because of missing supply voltage, for instance, the Wurm gateway will recognise it and report it to the responsible authority with the appropriate priority.

In modern networked systems, innumerable values have to be recorded for diagnosis and documentation purposes. As “data managers”, our gateways can collect, prepare, and transmit data in compressed form to the requesting authority at a convenient time. The bus system is thus protected from overloading in peak periods of plant operation. In this way, for example, our gateways control the retrieval of temperatures for the HACCP documentation or of measured values of energy for the energy management.

The classic task of protocol conversion is, of course, also included in the service package of Wurm gateways. As “translators”, our gateways enable the communication of networks that work with different protocols. With such a comprehensive range of functions, the Wurm gateways significantly stand out from the functionally limited devices in the market.

Three device types are currently available: The two smaller ones, GTW-LAN 2.1. and GTW-LAN 2.2., are perfectly suited for use in plants with reduced functional require-

ments. The Multigate is the perfect solution for complex plants. In the third generation, the device has once again been significantly enhanced at a function and cost level. The new housing enables much easier mounting. The new Multigate 3 comes with the best features of all the Wurm gateways, which therefore also makes it ideally equipped for future demands.

This brochure provides an overview of the advantages of all Wurm gateways currently available.

THE BEST OF TWO WORLDS

With the new Multigate 3, the third model generation provides a convincing upgrade.

Two primary aims were pursued for the further development of the Multigate: Even more functional strength than before and easier mounting – for a practical package of services.

The result is rather impressive. The Multigate 3 can be implemented without time-consuming mechanical work and can be mounted on a top-hat rail instead of the door. This was achieved by a new housing. Deriving from the CMD300, the Multigate 3 has even smaller dimensions and can be replaced easily, if needed, because the connections are widely compatible with CMD300 as well.

At the same time, the Multigate 3 has been equipped with even more strength. The new generation comprises, of course, all the functions of the predecessor model Multigate 2, such as access for up to 5 users. The separation of 3 independent sections enables specific plant supervision where different fields of responsibility are involved.

Apart from these and other standard features, the Multigate 3 offers remarkable new services. The transmission speed can be set separately for both of the CAN buses, for instance. A decisive optimisation is a second LAN port which is decoupled via a separate controller. This enables, for instance, a second access via radio frequencies VPN-FUNK-002 or data coupling via Modbus TCP. The as yet undefined AUX

key can be used for a possible additional function at a later point. The new Multigate 3 combines the best qualities of two types of Wurm gateways – the performance of the Multigate 2 and the easy mounting of CMD300.

With this model, you will get a practice-oriented and at the same time highly efficient solution.



OPTIMAL SOLUTION FOR SMALL AND MEDIUM-SIZED PROJECTS

The range of features of the GTW-LAN 2.1 and GTW-LAN 2.2. modules is designed for reduced functional requirements. As communication units for a smooth data exchange, both of them are particularly appropriate for smaller and medium-sized plants with only a few refrigeration units and a small rack.

Both modules are designed especially for plants with the control technology of the product lines FRIGOENTRY and UNIVERSAL XP and, hence, are a perfect solution for the refrigeration technology in discounters or for building technology in small retail stores.

Up to four or six different FRIGOLINK master modules can be connected to GTW-LAN 2.1 and 2.2. The connection to the control system can be implemented fast and easily via CAN bus. 120 control devices can be connected to the CAN bus via both models. Up to three users can access the controllers connected via CAN bus at the same time.

Thanks to the separation of three sections, both models enable a targeted allocation of the data communication and the alarms. Plant components, for instance, can be allocated according to responsibilities and thus be protected from unauthorised access as refrigeration technology, building technology and plug-in refrigeration units often have different service partners. Alarms are also transmitted automatically to up to five different destinations per section.

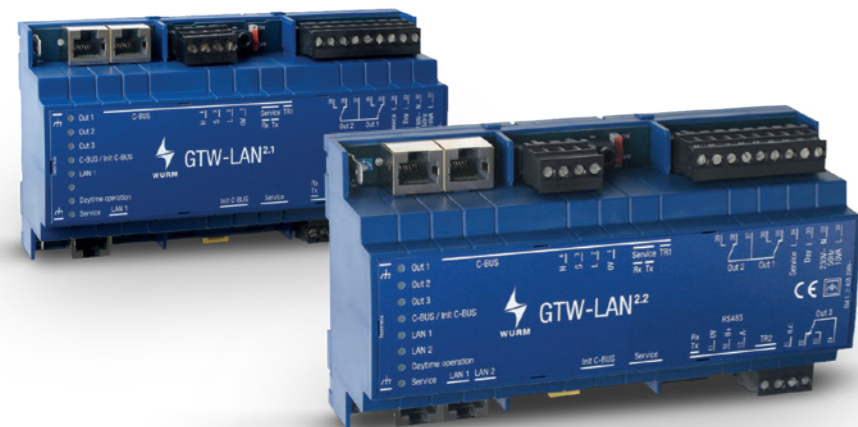
In addition to two relays for the collective alarms of the entire system, the two GTW-LAN 2 models can be expanded by input and output modules with additional inputs and relays. This provides the user with even more flexibility.

The integrated real-time clock is extremely useful for the requirements of the retail industry. It provides accurate documentation of occurrences in terms of time and is the basis for the time switches. An input for

the recording of the light signals is practice-oriented as well. This enables an easy transmission of the day and night function for the entire system. As a result, all devices will always work synchronously.

Both GTW-LAN 2 models have been optimised recently, which was very well received by our users. They appreciate not only the wide range of functions, but also the fast and easy installation in the control cabinet due to the top-hat-rail mounting and DIN installation dimensions. Retrofitting is uncomplicated as well, as both models are 100 percent exchange-compatible to the predecessor.

With their broad range of tasks, GTW-LAN 2.1 and GTW-LAN 2.2 offer much more than devices for pure data transmission. They monitor all control devices for proper operation and send an alarm in the event of any anomalies. At the same time, they protect access to the plant with individually assigned passwords and track the identified users.



WURM GATEWAYS IN COMPARISON

	GTW-LAN 2.1	GTW-LAN 2.2	MULTIGATE 3
CONSTRUCTION			
Material	Plastics		
Assembly	Top-hat rail TH 35-15 or TH 35-7.5 (DIN EN 60715)		
Mains voltage connection	Screw terminals for cables with wire end ferrules		
SYSTEM EXTENSION			
Connectable FIO-PAT	16		
CONNECTIONS			
Ethernet (TCP/IP)	1	2	2
CAN buses / Participants	1 / 120	1 / 120	2 / 240
Direct access	-	-	USB Host, USB Device
RS485 (MODBUS-RTU)	yes, reserved		
CONTROL DEVICES, SECTIONS AND PASSWORDS			
Recognised control devices	All types, max. 4 FRIGOLINK master modules	All types, max. 6 FRIGOLINK master modules	All types, no restrictions
Separation of sections	3 sections		
Separated passwords for each section	yes		
Service operation	yes		
PARTICIPANTS AND ACCESS			
Max. participants via direct access	-	-	1
Max. participants via Ethernet	3	3	5
ALARMS AND FORWARDING			
Alarm relays	3 change-over contacts, configurable		
Alarm destinations	5 per section		
Email alert in the event of an alarm	Ethernet		
INPUTS / OUTPUTS			
230V ~ Day / Night signal	yes		
230V ~ Service / Universal input	-	-	yes
Change-over contact	3, configurable alarm or Universal DO 1-3		
Normally open contact	-	-	1, configurable Universal DO 4
OTHER			
Remote updateability	yes		
Active no-fault message	Configurable		
Recording (HACCP, history data) for 2 years	-	-	yes
Change list per section	-	-	yes
HD recorder	-	-	yes
METEOLINK	-	-	yes
Data coupling	-	-	MODBUS-TCP, ASCII
Web server	-	-	yes
Keys	2 (Init, Service)	2 (Init, Service)	3 (Init, Service, Aux)



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