0TGxxxx.0x

1 General information

Technology Guarding is the license protection used for individual software components. Licenses are stored on the "Technology Guard", a dongle that is connected to an available USB interface on the target system.

The licenses themselves are checked in Automation Runtime on the target system. Automation Runtime will detect a license violation if there are licensing requirements that are not covered by the licenses on the Technology Guard.

- · 2 tamper-resistant operating hours counters
- Possible to store multiple B&R licenses
- · Customized license storage possible
- · Customized data storage possible

Information:

The extended user-specific operation of the Technology Guard is handled via library "AsGuard". For additional information about library "AsGuard", see Automation Help.

1.1 Differences between Technology Guard models

0TG1000.01

Mass storage device (MSD) variant. The Technology Guard is registered internally like a normal USB flash drive. It is displayed in Windows with a drive letter.

0TG1000.02

Human interface device (HID) variant. Identical in design to 0TG1000.01, but the Technology Guard is registered internally like a USB mouse, for example. It is not displayed in Windows.

Information:

Technology Guard 0TG1000.02 is only supported starting with Automation Runtime D4.09.

0TGF016.01

Mass storage device (MSD) variant. The Technology Guard is registered internally like a normal USB flash drive. It is displayed in Windows with a drive letter. 16 GB of memory are available for applications. Relevant machine data can thus be stored directly on the USB flash drive.

Data sheet V2.02

2 Order data

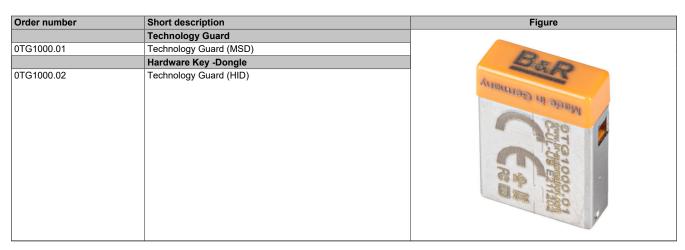


Table 1: 0TG1000.01, 0TG1000.02 - Order data

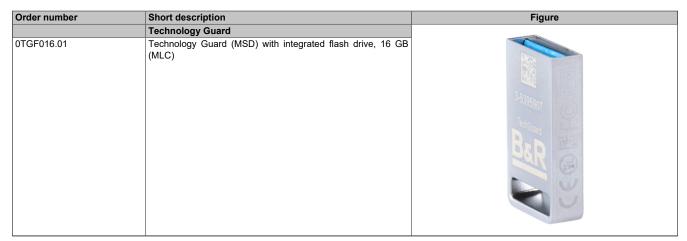


Table 2: 0TGF016.01 - Order data

2 Data sheet V2.02

3 Technical data

Order number	0TG1000.01	0TG1000.02	0TGF016.01	
Short description		,		
Accessories	Technology Guard for B	Technology Guard for B&R license management		
General information				
Note	Manufacturer ID: 0x064F Product ID: 0x03E9	Manufacturer ID: 0x064F Product ID: 0x2AF9	Manufacturer ID: 0x064F Product ID: 0x03F3	
Connection	High-speed USB 2.0 c	ertified, 1.1 compatible	USB 3.1 type A, compatible with 2.0	
Coding	128-bit	AES, SHA-256, 2048-bit RSA, 224	-bit ECC	
Data retention	10 years at roo	10 years at room temperature		
Data reliability		Licenses: Up to 10 million updates	<u> </u>	
MTBF		>3 million hours		
Power supply		5 V		
Power consumption		<20 mA (LEDs off) <60 mA (both LEDs on)		
Application memory				
Size	241 bytes cus	stomized data	16 GB customized data	
Operation		Via library AsGuard		
Data retention	-	-	>1 year at 2.5 TB (write) >3 years at 250 GB (write)	
Guaranteed erase/write cycles	Up to 10 mil	llion updates	-	
Certifications				
CE		Yes		
UKCA		Yes		
UL	_	cULus E115267 Industrial control equipment		
HazLoc	cULus HazL Industrial con for hazardo	cULus HazLoc E180196 Industrial control equipment for hazardous locations Class I, Division 2, Groups ABCD, T4		
DNV	Temperature: Humidity: B Vibration:	Temperature: B (0 to 55°C) Humidity: B (up to 100%) Vibration: A (0.7 g) EMC: B (bridge and open deck)		
LR	EN	IV3	-	
KR	-	Yes	-	
ABS	Y	es	-	
BV	Temperatu Vibratio	EC31B Temperature: 5 - 55°C Vibration: 0.7 g EMC: Bridge and open deck		
EAC		Product family certification		
Endurance				
Guaranteed data volume				
Guaranteed	-	-	40 TB	
Results for 5 years	-	-	20 GB/day	
Erase/Write cycles				
Guaranteed		-	3000 per cell (2-bit)	
Ambient conditions				
Temperature				
Operation	-25 to	85°C	-25 to 55°C	
Relative humidity	-23 to	T	20 00 00	
Operation		5 to 95%, non-condensing		
Mechanical properties		5 to 9570, Horr-condensing		
Dimensions				
Width	40	mm	12.4	
		mm 7 mm	12.1 mm	
Length Height	16.7	16.7 mm 22 mm 4.5 mm		

Table 3: 0TG1000.01, 0TG1000.02, 0TGF016.01 - Technical data

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