

# 0TGF016.01

## 1 General information

Technology Guarding is a licensing approach used to safeguard individual software components. Licenses are stored on the Technology Guard, a dongle that is inserted into an available USB interface on the target system.

The licenses themselves are verified in Automation Runtime on the target system, however. Automation Runtime will signal a license violation if the system has licensing requirements that are not covered by the licenses on the Technology Guard.

16 GB of memory are available for applications. Relevant machine data can thus be stored directly on the USB flash drive.

- Possible to store multiple B&R licenses
- Customer-specific license storage possible
- Integrated 16 GB data storage

### Information:

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

## 2 Order data


Model number	Short description	Figure
0TGF016.01	Technology Guard (MSD) with integrated flash drive, 16 GB (MLC)	

Table 1: 0TGF016.01 - Order data

### 3 Technical data

<b>Model number</b>	<b>OTGF016.01</b>
<b>Short description</b>	
Accessories	Technology Guard for B&R license management, integrated flash memory
<b>General information</b>	
Connection	USB 3.1 type A, compatible with 2.0
Keying	128-bit AES, SHA-256, 2048-bit RSA, 224-bit ECC
Data retention	10 years at 40°C
Data reliability	Licenses: Up to 10 million updates
MTBF	>3 million hours
Power supply	5 V
Power consumption	Max. 130 mA with USB 2.0 Max. 180 mA with USB 3.1
Application memory	
Size	16 GB customized data
Operation	License management using library AsGuard
Data retention	>1 year with 2.5 TB (write) >3 years with 250 GB (write)
<b>Endurance</b>	
Guaranteed data volume	
Guaranteed	40 TB
Results for 5 years	20 GB/day
Erase/Write cycles	
Guaranteed	3000 per cell (2-bit)
<b>Environmental conditions</b>	
Temperature	
Operation	-25 to 55°C
Relative humidity	
Operation	5 to 95%, non-condensing
<b>Mechanical properties</b>	
Dimensions	
Width	12.1 mm
Length	22 mm
Height	4.5 mm

Table 2: OTGF016.01 - Technical data