



# Full Metal FLASH DRIVE+ Hermetic Military

*Designed to be safe*

Conventional USB sticks are completely unsuitable for reliable data storage under extreme environmental conditions. They cannot withstand the increased mechanical requirements and are above all intended for a typical office environment. For this reason, altec ComputerSysteme has been successfully developing and marketing practically indestructible flash memory solutions for industrial and military applications for more than 20 years.

## Applications

The altec "Full Metal FlashDrive+ Hermetic Military" was developed to withstand the toughest environmental conditions as a compact and mobile data storage device. It is typically used in avionics and aerospace applications, by the military and in heavy industry. In other words, wherever your data needs perfect protection against physical and mechanical destruction.

## Protection mechanisms

The altec "Full Metal FlashDrive+ Hermetic Military" is resistant to practically any environmental danger. The case of solid aluminium encloses and protects the core, and a special sealing compound hermetically seals the sensitive electronic components within. The low viscosity sealing compound penetrates the smallest cavities, e.g. between the printed circuit board and the SMD components, and ensures an optimum mechanical bond. There are no air inclusions and thus no problems due to local hotspots, loosening of components and cracks. Accordingly, the altec "Full Metal FlashDrive+ Hermetic Military" is very resistant to moisture, pressure and temperature changes. The full encapsulation of the electronic circuits and the perfect mechanical bond to the enclosing case protects your data

reliably against liquids, dust, dirt, shock and vibration.

## Options and Features

The "Full Metal FlashDrive+ Hermetic Military" is also a very flexible data storage system with numerous configuration options. In addition to a range of cases with different designs e.g. a form protected against polarity reversal, colours and labelling and numerous firmware options such as several LUN's, write protection, hidden partitions and customized identifier (product & vendor ID) are also possible.

The partitioning of total capacity into SLC and MLC flash memory areas in conjunction with firmware options and a firmware upgrade possibility later on allows very flexible ranges of application.

altec also offers support for long product cycles with EOL (End of life), PCN (Product change notice) and BOM (Bill of materials) as required by the ISO 9001 quality assurance guidelines.

## Quality assurance

For best quality and highest reliability each altec "Full Metal FlashDrive+ Hermetic Military" is also available with several different certifications and as an option you can request individual product testing in our own environmental chamber before delivery.

### TECHNICAL INFORMATIONS • ITEM NO.: 27AXXYZP

XX=CAPACITIES IN GB (04, 08, 16 ETC.), Y=S (SLC) OR Y=M (MLC), Z=C (CHAMPAGNE) OR Z=S (BLACK)

<b>HARDWARE</b>		<b>POWER REQUIREMENTS</b>	
– Interface:	USB 2.0 Hi-Speed interface downwards compatible to USB 1.1	– DC Input Voltage:	5 Volt ±10%
– Capacities:	4, 8, 16, 32*, 64** GB, other on request	– SLC Power Consumption:	approx. 40 mA standby, approx. 60 mA read, approx. 60 mA write
– NAND Flash Types:	*SLC up to 32 GB, **MLC up to 64 GB	– MLC Power Consumption:	approx. 40 mA standby, approx. 60 mA read, approx. 70 mA write
– Formatting:	not formatted	<b>ENVIRONMENTAL SPECIFICATIONS</b>	
– Dimensions:	62 x 20 x 9 mm (L x W x H)	– Temperature:	-25° to +85° C (operating)
<b>TRANSFER RATES</b> (1 kB = 1024 Bytes; 1 MB = 1024 * 1024 Bytes)		(other on request)	-40° to +85° C (non-operating)
– SLC Read:	7 MB/s (4 kB), 17 MB/s (64 kB)	– Humidity:	8% to 95%, non-condensing
– SLC Write:	2.5 MB/s (4 kB), 6 MB/s (64 kB)	– Certifications and protection classes:	on request
– MLC Read:	7 MB/s (4 kB), 17 MB/s (64 kB)		
– MLC Write:	2.5 MB/s (4 kB), 5 MB/s (64 kB)		

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ISO 9001:2008 certified



MADE IN GERMANY