

XL+ | CF 5.0 | CF Card

SMART's XL+ CF Cards offer reliable, high performance in an industry standard CompactFlash[®] (CF) form factor. The industrial-grade XL+ CF Card products specifically support OEM markets of networking, telecommunication and data communication, embedded computing, medical, and industrial applications. SMART has designed their CF Cards using Single-Level Cell (SLC) Flash technology for enhanced data integrity and life time expectations in critical embedded applications.

SMART'S CF Card product line supports Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.), which is designed to reduce field failures and unscheduled service maintenance. S.M.A.R.T. enables a reliable monitoring application that efficiently supports CF Cards in the field and guarantees 24/7 service availability.

Features & Benefits

- Highly Reliable SLC NAND Flash Technology
- Static and Dynamic Wear-Leveling
- Field Upgradeable Firmware
- RoHS-6 Compliant
- Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) Support



Applications

- Communications
- Defense
- Gaming
- Industrial Control Equipment
- Networking
- Printers

Product Family Overview

Form Factor	Capacity	Sequential Performance
CF 5.0 CF Card	512MB to 64GB	Up to 55MB/s Read Up to 27MB/s Write

Specifications

	XL+ CF 5.0 CF Card	
NAND Type	SLC	
Performance		
Sequential Read (maximum)	Up to 55MB/s	
Sequential Write (maximum)	Up to 27MB/s	
Reliability		
Data Reliability	< 1 Non-Recoverable Error in 10 ¹⁴ bits read	
Data Retention	10 years >90% life remaining 1 year at the end of life	
Endurance	TBW up to 3TB per 1GB capacity	
Power		
VCC	5.0V+10%	
	3.3V+5%	
Read	< 200mA	
Write	< 200mA	
Idle	< 4mA	
Environmental		
Shock (operational)	50G @ 11ms	
Vibration	15G peak to peak	
Operating Temperature	Commercial: 0°C to +70°C	
	Industrial: -40°C to +85°C	
Storage Temperature	-55°C to +85°C	
Humidity	5% to 95%	
Physical		
Length	36.4mm	
Width	42.8mm	
Thickness	3.3mm	

Ordering Information

Part Number	Density	
XL+ CF 5.0 CF Card Commercial Operating Temperature (0°C to +70°C)		
SG9CF64GHYDD	64GB	
SG9CF32GHYDD	32GB	
SG9CF16GHYDC	16GB	
SG9CF8GHYDB	8GB	
SG9CF4GHYDA	4GB	
SG9CF2GHYD9	2GB	
SG9CF1GHYD4	1GB	
SG9CF512HYD2	512MB	
XL+ CF 5.0 CF Card Industrial Operating Temperature (-40°C to +85°C)		
SG9CF64GHYDDI	64GB	
SG9CF32GHYDDI	32GB	
SG9CF16GHYDCI	16GB	
SG9CF8GHYDBI	8GB	
SG9CF4GHYDAI	4GB	
SG9CF2GHYD9I	2GB	
SG9CF1GHYD4I	1GB	
SG9CF512HYD2I	512MB	



For more information, please visit: www.smartm.com

*Product images are for promotional purposes only. Labels may not be representative of the actual product.

Headquarters/North America:

T: (+1) 800-956-7627 • T: (+1) 510-623-1231 F: (+1) 510-623-1434 • E: info@smartm.com

Latin America:

T: (+55) 11 4417-7200 • E: sales.br@smartm.com

EMEA:

T: (+44) 0 7826-064-745 • E: sales.euro@smartm.com

Asia/Pacific:

T: (+65) 6678-7670 • E: sales.asia@smartm.com

Customer Service:

T: (+1) 510-623-1231 • E: customers@smartm.com

©2025, SMART Modular Technologies, All rights reserved. The stylized "S" in conjunction with "SMART", as well as "SMART Modular Technologies" are registered trademarks of SMART Modular Technologies. All other trademarks are the property of the respective owners. These materials are provided by SMART Modular Technologies as a service to its customers and may only be used for informational purposes. 02.03.25/XL+_CF_Card/Rev.3