



# Industrial Grade Memory Cards

Reliability and durability solutions

## Serving Applications



Surveillance



DVR



Automotive electronics



Rail traffic



Medical



Industrial automation



Transportation



Networking



Drone

## Highlights

- Operating Temperature Range: -25°C~85°C and -40°C~85°C
- High Endurance
- Support health status meter to ensure timely preventative maintenance
- Advanced memory management FW features auto read refresh, ECC, bad block management Smart GC and wear leveling.
- Sudden-Power-Loss safeguard
- Stable sustained performance
- Durable design: water proof, shock proof, X-ray proof and magnet proof
- Operating voltage: 2.7V~3.6V

# Reliable storage for industrial applications

The FORESEE Industrial Grade SD and microSD cards deliver trusted solutions for industrial applications requiring wide temperature, high reliability, durability and high intensity recording.

Built for and tested in the demanding conditions, the FORESEE Industrial Grade SD and microSD cards have an advanced memory management FW which includes auto read refresh, Error Correction Code (ECC) algorithms, bad block management and wear leveling. A wide range of applications with stringent requirements can rely on FORESEE Industrial memory cards to capture every critical footage, record each event and ensure quality of service to end-users.

From real-life situations and outcomes such as discovering that data is missing, failing to save critical data, unexpectedly write-stop due to short lifespan, endurance of the memory card is crucial. The FORESEE Industrial Grade SD and microSD cards offer industry-leading endurance to meet the requirements of data intensive applications.

Stable sustained sequential and random performance is applied to the FORESEE Industrial Grade memory cards, avoiding erratic fluctuations and providing smooth video recording without frame drop during continuous video recording under corresponding video speed class of the memory cards.

## FORESEE Industrial Grade Memory Card Specifications

Specifications	Industrial microSD Cards	Industrial WT microSD Cards	Industrial pSLC microSD Cards	Industrial SD Cards	Industrial WT SD Cards
Capacity <sup>1</sup>	32GB – 512GB	8GB – 256GB	8GB – 128GB	32GB – 512GB	8GB – 256GB
SD Spec	SD6.1	SD6.1	SD6.1	SD6.1	SD6.1
Interface	UHS-I (SDR104)	UHS-I (SDR104)	UHS-I (SDR104)	UHS-I (SDR104)	UHS-I (SDR104)
Flash Type	Industrial TLC	MLC/Industrial TLC	pSLC	Industrial TLC	MLC/Industrial TLC
Endurance	3K	5K/3K	30K	3K	5K/3K
Operating Temp.	-25°C-85°C	-40°C-85°C	-40°C-85°C	-25°C-85°C	-40°C-85°C
Storage Temp.	-40°C-85°C	-40°C-85°C	-40°C-85°C	-40°C-85°C	-40°C-85°C
Speed Class <sup>2</sup>	32GB: C10 U1 V10 A1 64GB-512GB: C10 U3 V30 A1	8GB: C10 U1 V10 A2 16GB: C10 U3 V30 A2 32GB: C10 U1 V10 A1 64GB-256GB: C10 U3 V30 A1	C10 U3 V30 A2	32GB: C10 U1 V10 64GB-512GB: C10 U3 V30	8GB: C10 U1 V10 16GB: C10 U3 V30 32GB: C10 U1 V10 64GB-256GB: C10 U3 V30
Performance <sup>2</sup>	V10: Read/write speed up to 100/10 MB/s V30: Read/write speed up to 100/30 MB/s				
Operating Voltage	2.7V-3.6V	2.7V-3.6V	2.7V-3.6V	2.7V-3.6V	2.7V-3.6V
Dimensions	15mm X 11mm X 1mm	15mm X 11mm X 1mm	15mm X 11mm X 1mm	32mm X 24mm X 2.1mm	32mm X 24mm X 2.1mm

## Part Number Information

Capacity	Industrial microSD Cards	Industrial WT microSD Cards	Industrial pSLC microSD Cards	Industrial SD Cards	Industrial WT SD Cards
8GB	-	FC5RC2008G-R	FC5SE2008G-S	-	FC8RC0008G-R
16GB	-	FC5RE2016G-R	FC5SE2016G-S	-	FC8RE0016G-R
32GB	FC5MC1032G-I	FC5RC1032G-R	FC5SE2032G-S	FC8MC0032G-I	FC8RC0032G-R
64GB	FC5ME1064G-I	FC5RE1064G-R	FC5SE2064G-S	FC8ME0064G-I	FC8RE0064G-R
128GB	FC5ME1128G-I	FC5RE1128G-R	FC5SE2128G-S	FC8ME0128G-I	FC8RE0128G-R
256GB	FC5ME1256G-I	FC5RE1256G-R	-	FC8ME0256G-I	FC8RE0256G-R
512GB	FC5ME1512G-I	-	-	FC8ME0512G-I	-

1.1GB=1,000,000,000 bytes. Actual user storage less.

2.Test condition: based on Testmetrix VTE4100. Performance may be lower depending on host device, usage and other factors. 1MB=1,000,000 bytes.

SD, SDHC, SDXC, microSD, microSDHC and microSDXC Logos are trademarks of SD-3C LLC.