



MERGE

Slim. Effective. Bold.

MERGE is an engineering and design marvel! With its revolutionary balance of cost and features, MERGE incorporates outstanding technology including a 2.0 inch in-plane switching (IPS) LCD delivering stunning colors and wide viewing angle, a hybrid of flex & rigid PCBA contributing to a stunningly svelte design and an innovative and razor slim sensor from NEXT operating on Active Thermal Sensing technology delivering unmatched performance with any finger type (dry, wet or otherwise). The sleek sensor also enables flush mount to the product surface for smooth and natural finger placement. Of course, this engineering masterpiece possesses the quality and performance values of the Invixium brand and is interoperable with our other products through IXM WEB.

MERGE CR has all the ingredients of the MERGE family except LCD & Fingerprint sensor. It also includes support for various RFID card technologies, making it ideal for installations where biometric and card based devices are required.



SLIM
FACTOR



THERMAL
SENSING



FLEX-RIGID
PCB



IPS LCD WIDE
VIEWING ANGLE



ANDROID OS



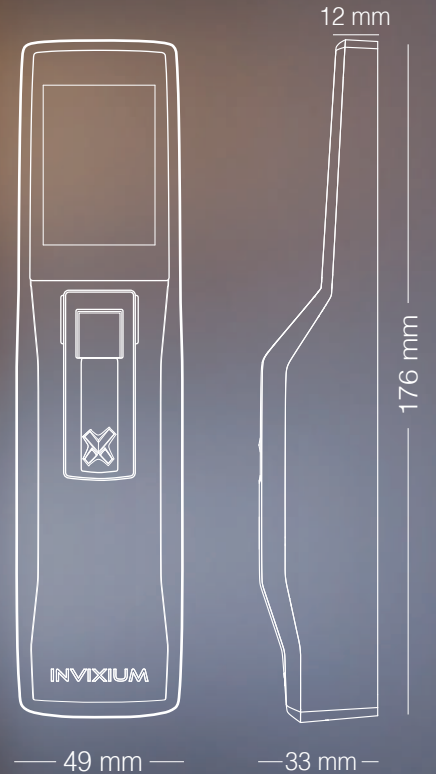
Corning®
Gorilla® Glass



Technical Specifications

Processor	ARM Cortex A8 – 800MHz
Random Access Memory	512 MB DDR3L @ 303 MHz
Flash Memory - NAND	512 MB
Operating System	Android® OS 4.1.2
Serial Communication	RS485, USB Aux
Ethernet	100BASE-T
Wiegand	Customizable up-to 512 bits
USB	USB 2.0 On - The - Go (OTG)
# of SPO	1
Door Access Controller	1A (1-Output, 2-Input, 1-Relay)
Anti-Shock Vandal Protection	Standard
LCD & Interface	2.0" IPS Cap Touch screen
Super Strong Protective Screen Cover	Corning® Gorilla® Glass 4
LEDs	1 (Power & Status)
Audio	Speaker (2 Watts)
1 : N Users (records)	500 users (1K biometric records)
1 : 1 Users (records)	5K users (10K biometric records)
# of Transaction Logs	25K
PoE+	IEEE 802.3at
Power Supply	12V DC @ 1A, 24V DC @ 0.5A
Operating Temperature	0° C to +60° C (32° F to +140° F)
Relative Humidity	0% ~ 80%, non condensing
Regulatory Approvals and Certificates	FCC, CE, RoHS, IP65 Kit (Sold Separately)

Dimensions



Device Models

MERGE	Sensor	Model	Color
	FP	22	White
		4	Black
			White/Black

FP - Active Thermal Sensor

22 - Fingerprint + PIN + Card Reader[†] (MIFARE / DESFire)

4 - Fingerprint + PIN + Card Reader[†] (iCLASS / MIFARE / DESFire)

iCLASS - 13.56 MHz (iCLASS Standard, iCLASS SE)

MIFARE - 13.56 MHz (MIFARE Classic, DESFire, DESFire EV1)

Technical Specifications

Processor	ARM Cortex A8 – 800MHz
Random Access Memory	512 MB DDR3L
Flash Memory - NAND	512 MB
Operating System	Android® OS 4.1.2
Serial Communication	RS485, USB Aux
Ethernet	100BASE-T
Wiegand	Customizable up-to 512 bits
USB	USB 2.0 On-The-Go (OTG)
# of SPO	1
Door Access Controller	1A (1-Output, 2-Input, 1-Relay)
Anti-Shock Vandal Protection	Standard
LEDs	1 (Power & Status)
Audio	Speaker
1 : 1 Users	5K users
# of Transaction Logs	25K
PoE+	IEEE 802.3at
Power Supply	12V DC @ 1A, 24V DC @0.25A
Operating Temperature	0° C to +60° C (32° F to +140° F)
Relative Humidity	0% ~ 80%, non condensing
Regulatory Approvals and Certificates	FCC, CE, RoHS, IP65 Kit (sold seperately)

Dimensions



Device Models

MERGE CR	Card	Color
	CR	White
		Black

CR - Card Reader[†] Only (MIFARE / DESFire)

MIFARE - 13.56 MHz (MIFARE Classic, DESFire, DESFire EV1)

PRODUCT COMPARISON MATRIX



	MERGE CR	MERGE	MYCRO	SENSE 2 L series	SENSE 2 S series	TOUCH 2 S series	TOUCH 2 S Series Wi-Fi	TOUCH 2 L series	TITAN FV Series	TITAN FPU Series	TITAN FPLV Series
Device OS	Android	Android	Android	Android	Android	Android	Android	Android	Android	Android	Android
Biometric Modalities	—	Fingerprint	Fingerprint	Fingerprint	Fingerprint	Fingerprint	Fingerprint	Fingerprint	Face Recognition Finger Vein	Face Recognition Fingerprint	Face Recognition Fingerprint
Sensor Type	—	Active thermal NEXT	SecuGen Optical	Lumidigm Multispectral (Mercury)	SecuGen Optical	SecuGen Optical	SecuGen Optical	Lumidigm Multispectral (Mercury)	Hitachi Finger Vein	SecuGen Optical (FBI Certified)	Lumidigm Multispectral (Venus)
Tamper	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Internal Relay	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Finger Capacity (1: N)	—	1K	20K	40K	40K	40K	40K	40K	2K	100K	100K
Finger Capacity (1: 1)	5K	10K	50K	200K	200K	200K	200K	200K	1 million	1 million	1 million
Face Capacity (1: N)	—	—	—	—	—	—	—	—	100K	100K	100K
Log Capacity	25K	25K	100K	500K	500K	500K	500K	500K	500K	500K	500K
Audio	Speaker	Speaker	Multi-tone Buzzer	Speaker & Mic	Speaker & Mic	Speaker & Mic	Speaker & Mic	Speaker & Mic	Stereo Speaker & Mic	Stereo Speaker & Mic	Stereo Speaker & Mic
Weather Rating	IP65 Kit	IP65 Kit	IP65	IP65	IP65	IP65	IP65	IP65	IP67	IP67	IP67
Operating Temp	0°C to +60°C 32°F to +140°F	0°C to +60°C 32°F to +140°F	-20°C to +60°C -4°F to +140°F	-20°C to +60°C -4°F to +140°F	-20°C to +60°C -4°F to +140°F	-20°C to +60°C -4°F to +140°F	-20°C to +60°C -4°F to +140°F	-20°C to +60°C -4°F to +140°F	-25°C to +75°C -13°F to +167°F	-25°C to +75°C -13°F to +167°F	-25°C to +75°C -13°F to +167°F
Communication	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet
Power over Ethernet (PoE)	PoE+	PoE+	—	PoE+	PoE+	PoE+	PoE+	PoE+	PoE+	PoE+	PoE+
Power Supply	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 1 Amp	12 VDC @ 2 Amp	12 VDC @ 2 Amp	12 VDC @ 2 Amp
Camera	—	—	—	—	—	5 MP	5 MP	5 MP	21 MP	21 MP	21 MP
Wi-Fi	—	—	—	—	—	—	Yes	—	Yes	Yes	Yes
HDMI Output	—	—	—	—	—	—	—	—	Yes	Yes	Yes
LCD	—	2.0" IPS Touchscreen	—	—	—	2.4" IPS Touchscreen	2.4" IPS Touchscreen	2.4" IPS Touchscreen	5.0" IPS Touchscreen	5.0" IPS Touchscreen	5.0" IPS Touchscreen
Battery Backup (Accessory)	—	—	—	—	—	—	Li-ion 1400 mAh	Li-ion 1400 mAh	Li-ion 5000 mAh	Li-ion 5000 mAh	Li-ion 5000 mAh
Presence Detect	—	—	—	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Door Strike Supply	—	—	—	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA	12V@500mA 24V@250mA
Dimensions (LxWxD)	139x47x34 mm 5.5x1.9x1.3 in	176x49x33 mm 6.9x1.9x1.3 in	168x48x44 mm 6.6x1.9x1.7 in	199x48x49 mm 7.8x1.9x1.9 in	199x48x49 mm 7.8x1.9x1.9 in	199x48x49 mm 7.8x1.9x1.9 in	199x48x49 mm 7.8x1.9x1.9 in	199x48x49 mm 7.8x1.9x1.9 in	27x9x9 cm 10.6x3.5x3.5 in	27x9x9 cm 10.6x3.5x3.5 in	27x9x9 cm 10.6x3.5x3.5 in
Device Models	CR	FP22 FP4	FP1 FP2 FP3 FP4 FP5	FPL1 FPL2 FPL3 FPL4 FPL5	FP1 FP2 FP3 FP4 FP5	FP1 FP2 FP3 FP4 FP5	FP1 FP2 FP3 FP4 FP5	FPL1 FPL2 FPL3 FPL4 FPL5	FV1 FV2 FV5	FPU1 FPU2 FPU5	FPLV1 FPLV2 FPLV5
Color Options	White Black	White Black White/Black	Black/Chrome	Black/Titanium	Black/Chrome	White/Gold Black/Chrome	White/Gold Black/Chrome	Black/Chrome Black/Titanium	Brushed Aluminium Matte Black	Brushed Aluminium Matte Black	Brushed Aluminium Matte Black

CR: Card Reader (MiFARE / DESFire)
FP: SecuGen Optical or NEXT Sensor
FPL: Lumidigm Multispectral (Mercury) Sensor
FPU: SecuGen Optical (FBI Certified) Sensor
FV: Hitachi Finger Vein Sensor
FPLV: Lumidigm Multispectral (Venus) Sensor
 1: Finger only
 2: Card Access (EM Prox / MiFARE / DESFire)
 22: Card Access (MiFARE / DESFire)
 3: Card Access (HID Prox)
 4: Card Access (iCLASS / MiFARE / DESFire)
 5: Card Access (EM Prox / HID Prox / iCLASS MiFARE / DESFire)