Technical Data Sheet

3M™ CR5400 Double-Sided ID1 Reader

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Date Issued: November, 2014

Product Use

The 3M™ CR5400 Double-sided ID1 Reader inspects and images government issued identity documents ID1 sized (85 x 54mm) in a variety of market segments like Retail, Financial and Hospitality.

Optional functions include:

- Docking cradle supporting non-optical reading requirements
- Support for biometrically enabled travel documents containing contactless integrated circuit chips (eIDs)
- ISO 7810 and ISO 7811 3-Track magnetic stripe reader

Key Standard Features & Functionality

- Double-sided document imaging for ID1 size documents in 24-bit color
- Configurable image resolution up to 630 DPI
- Multiple wavelength illumination visible, near infrared, and UV
- Anti-Glare technology eliminates image artifacts due to laminate or OVDs
- Automatic card detection and processing
- Automatic card eject when reading is complete or when power is turned off
- Windows® 7or Windows® 8 compatible
- USB 2.0 high speed compatible interface
- Portrait position when inserting into the ID1 Reader
- Elegant industrial design look and feel
- Rugged and durable design
- Industry standard ¼ x 20 threaded fittings to hold the ID1 Reader to a mounting device (tripod, kiosk, etc.; cradle option only)

Comprehensive Software Features

- Flexible software interface allows host application to select which illumination sources to use, image type, image compression, image resolution, photo extraction, reflection or ambient light elimination, colour enhancement, which date groups to read, etc.
- Enables images to be accessed as BMP, PNG or JPEG format
- Simple high level API for quick program development or detailed low level API for fine control
 of all reader functions
- Contactless IC reading for ePassports (LDS 1.7) including Active and Passive authentication, Basic Access Control, Extended Access Control (PKI 1.11) and Supplemental Access Control. The SDK provides writing capability using APDUs.
- Full SDK including DLLs, code examples, utilities documentation and demonstration programs. Can be used with Visual C++®, Java® and Microsoft® .NET Framework for Visual Basic® .NET and Visual C#

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Reading Capability	The 3M™ CR5400 Double-sided ID1 Reader reads the following: ICAO compliant ID1 size in near infrared (IR) per ICAO 9303 specification ISO 14443 Type A and B contactless ICs at 13.56 MHz (optional) ISO 7810 and ISO 7811 AAMVA 3-Track Mag (optional) 1D barcodes (2 of 5 interleaved, Code 128, and Code 39) 2D barcodes (PDF 417, QR®, DataMatrix™ and Aztec formats) Non ICAO OCR with variable font types and size that displays biographical data found on global government issued IDs (optional)	
Illumination	The reader illuminates documents in multiple wavelengths and lighting orientations: Near IR B900, 880nm, +/-5% White visible, 430-700nm Ultraviolet A (UVA): 360-370nm	
Resolution	 Sensor: 10 Megapixels, CMOS, RGB 24 bit color system Configurable image resolution, up to 630 DPI High quality images suitable for reading barcodes and OCR 	
elD (RFID) Option	 Contactless IC reading and writing capability according to: ISO 14443 Type-A and Type-B using a PC/SC interface ICAO recommendations in ICAO Doc 9303 supplement, LDS 1.7 PKI 1.11 All standardized rates, up to 848 Kbps, read-out times depend on RFID tag, operating system and amount of data stored in the chip. PC/SC interface provides support to other card types such as MIFARE™ and MIFARE™ DESFire™ 	
Firmware Upgrade	 Upgradeable firmware via USB 2.0 interface Non-volatile configuration and calibration accessed via USB 2.0 interface Configuration can be saved to a file for backup or maintenance 	
Regulatory	 FCC Part 15 Class A UL, UL-C CE, CB WEEE/RoHS Directive 2011/65/EU 	
Operating Environment	 Humidity: 20 to 95% (R.H. non-condensing) Temperature: 0° to 40° C operating; -20° to 50° C storage 	
Minimum PC Specification	Software must be installed on a customer-supplied PC. The following minimum configuration is recommended: • 2 GHz Pentium® 4 CPU (Intel Core 2 Duo recommended) • 1GB DRAM • USB 2.0 • 50 Mb of Hard Drive space for software • Windows® 8, Windows® 7 or Windows Vista® operating systems, 32 or 64 bit	

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3M[™] CR5400 Double-Sided ID1 Reader

Standard Dimensions	Imager Only	Imager and Cradle
	 Length: 15.5 cm 	17.7cm
	 Width: 10.8 cm 	10.8cm
	 Height: 10.2 cm 	11.5cm
	 Weight: < 1 kg or 2.2 lbs 	s 2.4lbs
Status Indicators	 The 3M™ CR5400 Double-sided ID1 Reader has an illuminated card slot to enhance ease use and provide user feedback for optical, RFID and MSR processes. 	
	The readers perform a pProgrammable via softw	power-up self-test and indicate failure using status LEDs. pare SDK
Power	Imager – USB Powered	
1 OWEI	 Imager and Cradle – 1.2 	A, 5V, Universal input wall-mount external power supply
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