Product Range

2024

≡ OPTICON

Type of Barcodes

1D Barcode

Industrial 2 of 5

1234567890

Codabar

A1234567890B

EAN 13

1234567891231

Code 39

OPTICON

Code 128

Opticon

GS1 Databar

(01) 6547372828191 9

UPC A

0 71589 81230 8

Interleaved 2 of 5

1234567890

2D Barcode

Data Matrix

Maxicode
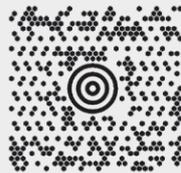
DotCode
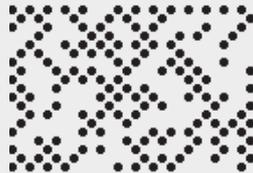
DMRE

Aztec

QR Code

Micro PDF417
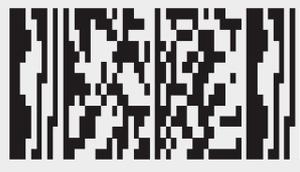
PDF417
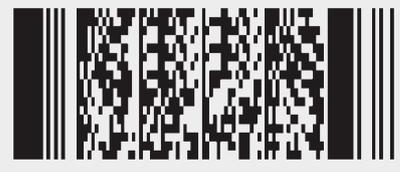
1D - CCD scanners

CCD modules are linear scan modules. They consist of a CCD sensor, which is basically a camera with one row of pixels, electronics to amplify the signal coming from the camera and a processor that decodes the signal and outputs the decoded data via a serial interface.

The CCD module has a built-in LED that illuminates the target barcode. This light is reflected and captured by the CCD sensor which converts the light into an electronic signal. That signal is then amplified and fed to a microprocessor which decodes the signal.

The module has an illumination LED that lights up the target barcode. The CCD sensor in the module 'looks' at the illuminated barcode through a small lens and captures one single line of the barcode. This line of pixels is then output as an analog signal, filtered and digitized by comparing it to a threshold level.

The resulting digital signal is then processed by a microcontroller which decodes it and subsequently transmits the decoded characters over a USB or serial interface.

Advantages:
• Extremely rugged since there are no moving parts
• Cheap due to the relatively simple construction
• Small
• Low power consumption

Disadvantages:
• Limited depth of field
• Less suitable for high-resolution labels
• Cannot read 2D codes

1D - Laser scanners

Laser engines are linear scan modules.

They consist of a small semiconductor laser, an optical system with a moving mirror to make the laser line, a photodiode to process the reflected laser light, electronics to amplify the signal from the photodiode and a processor that decodes the signal and outputs the decoded data via a serial interface or USB.

The scan module has its laser aimed towards a vibrating or rotating mirror that turns the dot into a line. This line is aimed at a target barcode which reflects the light back to the scan engine. The same mirror is then used to aim the reflected laser light to a photodetector. The output from this detector is then amplified, filtered, and fed to a microprocessor which decodes the signal.

Advantages:
• Cheap due to the relatively small required processing power
• Can read high-resolution barcode
• Large depth of field
• Low power consumption
• Fast scan rate

Disadvantages:
• Cannot read from LCD screen
• Cannot read 2D codes

2D scanners

A 2D barcode module also referred to as 2D imager, uses a CMOS camera similar to the cameras that are common in modern smartphones. They consist of a CMOS sensor, which together with a small lens form the actual camera, plus a high-speed processor with a big memory that processes the images delivered by the camera.

This CMOS sensor is similar to the ones common in smartphones but with a few important differences which make an Opticon 2D engine far more suitable to read 2D barcodes than a smartphone.

Advantages Opticon scanner vs smartphone:
• Global vs rolling shutter
• Monochrome vs color
• Low resolution vs high
• Fixed focus vs auto focus

Check our website for the explanation for each differences.

Handheld Scanners

Quick, intuitive and modern. Both our handheld and companion scanners are designed to be lightweight and easy to use, letting you quickly start scanning to improve your data management.

Our technology enables quicker, more accurate scanning and it even reads barcodes from smartphones and computer screens. Also damaged barcodes are no challenge for our devices.

Collecting scanned barcode data with your laptop, tablet or smartphone is made easy with the extensive companion scanners range. All these devices are extremely small and lightweight, making them easy to carry or store in a pocket.

All Opticon's handheld scanners come with a 2-year warranty and international service support.

Opticon handheld scanners power:
• Patient administration
• On-counter scanning
• Data reporting
• Price checking
• Hands-free scanning
• Inventory management
• Asset tracking
• and many other applications

Our range of Handheld scanners

| Cabled scanners | Wireless scanners | Companion scanners |

Thanks to years of experience, we became experts in creating the right barcode scanner for a variety of applications. An example of a scanner that is perfect for many applications is our cabled scanner.

Our cabled scanner ensures accuracy in customer transactions and it automates paper-based inventory processes. You can easily integrate the cabled handheld scanner on multiple interfaces to help ensure connectivity to a host and PC system. Either via USB or serial connectors.

The cordless freedom of Bluetooth® wireless communication offers the ability to roam away from the host device, which improves productivity and scanning convenience in a wide variety of industries including retail, healthcare, warehousing & distribution, transportation, and logistics.

Offering industry-leading 1D CCD/laser and 2D imager barcode technology our wireless barcode scanners seamlessly integrate into any business environment.

User-friendly, lightweight, intuitive, quick, and modern. These are all aspects of our companion scanners.

A companion scanner is a small, compact device that scans and stores data or in other words, a data collector. The user-friendly design fits easily in the palm of your hand making it easy to complete everyday tasks with an excellent one-click point and shoot technology, making the companion scanners simple for every user.

Cabled Scanners

C-37

Main specifications
- Barcode CCD Scanner
- Weight: Ca. 90 g / 3.2 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Hand scanner

Power supply RS232
– Enclosed: no
– Art. code: 10991

Model	Interface	Color	Stand	AM	IP rating	Art. code
C-37-WHT-USB	USB	White	No	No	42	12309
C-37-BLK-USB	USB	Black	No	No	42	12306
C-37-BLK-RS232	RS232	Black	No	No	42	12305

C-41S

Main specifications
- Barcode CCD Scanner
- Weight: Ca. 55 g / 1.9 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Hand scanner

Model	Interface	Color	Stand	AM	IP	Special	Art. code
C-41S-USB-HID-BLK	USB	Black	No	No	42	--	13894
C-41-USB-HID-AM-V-WHT	USB	White	No	Yes	42	Vibration mode	13673

L-46R

Main specifications
- Barcode Laser Scanner
- Weight: Ca. 112 g / 3.9 oz
- Drop proof: 1.8 m / 6 ft.
- Ergonomics: Pistol grip scanner

Stand
– Enclosed: yes

Power supply RS232
– Enclosed: no
– Art. code: 11052

Model	Interface	Color	Stand	AM	IP	Special	Art. code
L-46R-USB-BLK-STD	USB	Black	Yes, black	No	42	Interchangeable cable	14008
L-46R-USB-WHT-STD	USB	White	Yes, black	Yes	42	Interchangeable cable	14060
Stand for L-46	--	Black	Yes, black	No	--	--	15068
USB-CABLE-BLK-2M	USB	Black	--	--	--	--	14140
RS232-CABLE-BLK-2M	RS232	Black	--	--	--	2 meter	14142
RS232-CABLE-WHT-2M *	RS232	White	--	--	--	2 meter	14143 *

OPR-2001Z

Main specifications
- Barcode Laser Scanner
- Weight: Ca. 60 g / 2.1 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Hand Scanner

Stand
– Enclosed: yes
– Art. code: 11647

Power supply RS232
– Enclosed: no
– Art. code: 10991

Model	Interface	Color	Stand	AM	IP rating	Art. code
OPR-2001Z-STD-USB	USB	Black	Yes	No	42	11645
OPR-2001Z-STD-RS232	RS232	Black	Yes	No	42	11646

Cabled Scanners

OPR-3201Z

Main specifications
- Barcode Laser Scanner
- Weight: Ca. 80 g / 2.8 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Pistol grip scanner

Stand
– Enclosed: yes

Power supply RS232
– Enclosed: no
– Art. code: 10991

Model	Interface	Color	Stand	AM	IP rating	Art. code
OPR-3201Z-BLK+STD-USB	USB	Black	Yes, black	No	42	11789
OPR-3201Z-WHT+STD-USB **	USB	White	Yes, white	Yes	42	11795 **
OPR-3201Z-BLK-RS232C *	RS232C	Black	No	No	42	11842 *

L-22X

2D

Main specifications
- 2D CMOS Imager
- Weight: Ca. 77 g / 2.7 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Hand scanner

Stand
– Enclosed: yes
  (black model only)

Power supply RS232
– Enclosed: no
– Art. code: 11052

Model	Interface	Color	Stand	AM	IP rating	Art. code
L-22X-USB-BLK-STD	USB	Black	Yes, black	No	42	14009
L-22X-USB-WHT	USB	White	Yes, white	Yes	42	15086 *
RS232-CABLE-BLK-2M	RS232	Black	--	--	--	14160

* Subject to minimum order quantities   ** Discontinued, stock is still available

L-46X

Main specifications
- 2D CMOS Imager
- Scan rate: up to 100 fps
- Weight: Ca. 112 g / 3.9 oz
- Drop proof: 1.8 m / 6 ft.
- Ergonomics: Pistol grip scanner

Stand
– Enclosed: yes

Power supply RS232
– Enclosed: no
– Art. code: 11052

Model	Interface	Color	Stand	AM	IP	Special	Art. code
L-46X-USB-BLK-STD	USB	Black	Yes, black	No	42	Interchangeable cable	14007
L-46X-USB-WHT-STD US ∗	USB	White	Yes, black	Yes	42	Interchangeable cable	14606 ∗
Stand for L-46	--	Black	Yes, black	--	--	--	15068
USB-CABLE-BLK-2M	USB	Black	--	--	--	2 meter	14140
RS232-CABLE-BLK-2M	RS232	Black	--	--	--	2 meter	14142
RS232-CABLE-WHT-2M ∗	RS232	White	--	--	--	2 meter	14143 ∗

Presentation Scanners

M-10

Main specifications
- 2D CMOS Imager
- Omni-directional
- Scan rate: up to 60 fps
- Size: 72 x 70 X 139 mm
- Weight: Ca. 250 g / 8.82 oz
- Ergonomics: Presentation scanner

Power supply RS232
– Enclosed: no
– Art. code: 10991

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
M-10-USB-BLK	USB	Black	--	No	52	--	13356
M-10-RS232C-WHT *	RS232	White	--	No	52	--	13441 *
RS232-CABLE-BLK-2M	RS232	Black	--	--	--	2 meter	13695
USB-CABLE-BLK-2M	USB	Black	--	--	--	2 meter	14044 **

M-11

Main specifications
- 2D CMOS Imager
- Omni-directional
- Scan rate: up to 120 fps
- Fixed mount holes
- Size: 84.4 x 48 x 124.4 mm
- Weight: Ca. 220 g / 7.44 oz
- Ergonomics: Presentation scanner

Power supply RS232
– Enclosed: no
– Art. code: 11052

Model	Interface	Color	Stand	AM	IP rating	Art. code
M-11-BLK-USB	USB	Black	No	No	42	14294
RS232-M-11-CABLE-BLK-2.1M	RS232	Black	--	--	--	14499

* Subject to minimum order quantities   ** Discontinued, stock is still available

OPC-3301i

`1D - CCD`

Main specifications
- Barcode CCD Scanner
- Weight: Ca. 127 g / 4.3 oz
- Bluetooth
- MFi certified
- Ergonomics: Pistol grip scanner

CHG-3201	CRD-3301B	Power Supply 6V/2A	Rechargeable Battery	OPA-3201-USB Dongle
– Enclosed: no	– Enclosed: no	– Enclosed: no	– Enclosed: yes	– Enclosed: no
– Art. code: 13726	– Art. code: 13982 **	– Art. code: 10991	– Art. code: 13830	– Art. code: 13840

Model	Interface	Color	Stand	AM	IP rating	Art. code
OPC-3301i-BLK	Wireless	Black	No	No	42	13724

OPI-3301i

`2D`

Main specifications
- 2D CMOS Imager
- Weight: Ca. 132 g / 4.5 oz
- Bluetooth
- MFi certified
- Ergonomics: Pistol grip scanner

CHG-3201	CRD-3301B	Power Supply 6V/2A	Rechargeable Battery	OPA-3201-USB Dongle
– Enclosed: no	– Enclosed: no	– Enclosed: no	– Enclosed: yes	– Enclosed: no
– Art. code: 13726	– Art. code: 13982 **	– Art. code: 10991	– Art. code: 13830	– Art. code: 13840
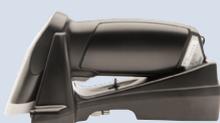
Model	Interface	Color	Stand	AM	IP rating	Art. code
OPI-3301i-BLK	Wireless	Black	No	No	42	13725

Ring Scanners

RS-2006

1D - Laser

Main specifications
- Barcode Laser Ringscanner
- Adjustable strap
- Keypad: 2 keys + 1 trigger on the strap
- USB
- Bluetooth
- Weight: Ca. 42 g / 1.4 oz (incl. battery and strap)

Neck lanyard
– Enclosed: yes

USB cable
– Enclosed: yes

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
RS-2006	Wireless	Black	Yes, bracket	No	42	Programmable	13919

RS-3000

2D

Main specifications
- Barcode 2D Imager scanner
- Adjustable strap
- Keypad: 2 keys + 1 trigger on the strap
- USB C
- Bluetooth 4.2 BLE
- Wireless QI charging or USB-C
- Weight: Ca. 34.4 g / 1.21 oz (incl. strap)

USB-C cable
– Enclosed: yes

Bracket + strap
– Enclosed: yes
– Art. code: 14864

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
RS-3000 set	USB	Black	Yes, bracket	No	42	Programmable	14789

OPN-2006

`1D - Laser`

Main specifications
- Barcode Laser Scanner
- Keypad: 2 keys
- USB
- Bluetooth
- Weight: Ca. 29 g / 1.0 oz
- Adjustable to OPN-2001 mode on request

Neck lanyard – Enclosed: yes	USB cable – Enclosed: yes	Silicone cover – Enclosed: no – Art. code: 13402

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
OPN-2006	USB	Black	No	No	42	Bluetooth	13336

OPN-2500

`1D - Laser`

Main specifications
- Barcode Laser Scanner
- Keypad: 2 keys
- USB
- Bluetooth
- Weight: Ca. 29 g / 1.0 oz

Neck lanyard – Enclosed: yes	USB cable – Enclosed: yes	Silicone cover – Enclosed: no – Art. code: 13402

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
OPN-2500	USB	Black	No	No	42	Batch	15101

Companion Scanners

OPN-4000 i+n

1D - CCD

Main specifications
• Barcode CCD Scanner
• Keypad: 2 keys
• USB
• Bluetooth
• MFi certified (i version)
• Weight: Ca. 53 g / 1.9 oz

Neck lanyard
– Enclosed: yes

USB cable
– Enclosed: yes

Silicone cover
– Enclosed: no
– Art. code: 13401

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
OPN-4000i-WHT	USB	White	No	No	42	BT-HID	13442
OPN-4000n-WHT	USB	White	No	No	42	BT-HID	13443

OPN-6000

2D

Main specifications
• 2D CMOS Imager
• Keypad: 2 keys
• USB-C
• Inductive charging
• Bluetooth
• Customized color options *

Neck lanyard
– Enclosed: yes

USB cable
– Enclosed: yes

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
OPN-6000	USB-C	Black	No	No	54	BT-HID	15123
OPN-6000-HLS	USB-C	White	No	Yes	54	BT-HID	15125 *

* Subject to minimum order quantities   ** Discontinued, stock is still available

OPN-3102i

Main specifications
- 2D CMOS Imager
- Keypad: 2 keys
- USB, Bluetooth, NFC
- MFi certified (white model)
- Weight: Ca. 57 g / 2.0 oz

Neck lanyard – Enclosed: yes	USB cable – Enclosed: yes	Silicone cover – Enclosed: no – Art. code: 13401	CRD-3000-BLK – Enclosed: no – Art. code: 14903	Power supply CRD – Enclosed: no – Art. code: 11052

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
OPN-3102i-BLK	USB	Black	No	No	54	BT-HID	14904
OPN-3102i-WHT	USB	White	No	No	54	MFi certified	14912

PX-20

Main specifications
- 2D CMOS Imager
- Keypad: 2 keys
- USB
- Bluetooth
- Weight: Ca. 40 g / 1.4 oz

Neck lanyard – Enclosed: yes	USB cable – Enclosed: yes	Silicone cover – Enclosed: no – Art. code: 14069	PX-20 Glove – Enclosed: no – 14325 Right – 14326 Left	PX-20 Arm Band – Enclosed: no – Art. code: 14494

Model	Interface	Color	Stand	AM	IP rating	Special	Art. code
PX-20	USB	Black	No	No	54	Programmable	13131

Mobile Computers

Since 1976 we are dedicated to developing and manufacturing world-class scan technology. More then 47 years, we maintained industry leadership and customer loyalty through innovative technologic advancements and a rich product line. By implementing our scan engines into terminals, we created a line of high-quality mobile computers.

Our mobile range takes scanning to a new level of complexity because our scanners contain GPS and can connect in various ways to provide real-time data transfer at any given moment. They run on different operating systems such as Windows Mobile, Android, and Proprietary, enabling the use of custom applications.

The mobile computer makes it easier to thrive in a complex environment. The devices are perfect for you if you are looking to optimize a process or service within your business.

Mobile Computers for Various Applications
Through their various features, our range provides an all-in-one solution for a variety of markets such as logistics, postal services, healthcare, merchandising, inventory management, field sales, and more. Raising performance efficiencies to the next level, and optimizing communication among various departments in complex work environments.

Quality with 2-Years Warranty
Our mobile computers automatically fall under a 2-year warranty. We ship internationally and have over 16 offices globally, so there is always an Opticon office nearby. Opticon provides customer-oriented service and has an in-house repair department, should you ever need it.

Our range of Mobile computers

| Android Mobile computers | Proprietary Mobile computers |

By implementing our scan engines into terminals, we created a line of high-quality mobile computers. As the Android platform quickly develops, we work simultaneously to provide our customers the newest mobile devices with Android capabilities.

To succeed in today's digital era, it is important to give your employees the right tools to complete their unique work tasks faster, smarter, and better. Ideal for industries such as logistics, postal services, healthcare, merchandising, and transportation.

Opticon offers a range of highly advanced proprietary mobile computers that are capable of much more than just accurate scanning.

Customers prefer Opticon mobile scanning devices because of their excellent product performance coming at an affordable price. Because all of our mobile devices run the same Operating System and can be programmed with the same free Software Development Kit, this product line is an excellent growth path for businesses. Even saving money on expensive programming.

Android Mobile Computers

H-35

`2D`

Main specifications
- 2D CMOS Imager
- Operating system: Android 11
- 5.5" touchscreen with Gorilla® Glass 3
- 13 MP camera with flash
- IP 65, Drop rating: 2.4m
- Qualcomm 2.0 GHz
- Octa-core Processor
- 4,420 mAh Battery
- Wi-Fi, 802.11 a/b/g/n/ac/r
- Bluetooth 5.1 LE, NFC, GPS
- Weight: Ca. 287 g / 10.1 oz (inc. battery)
- Wrist strap and USB-C cable enclosed

Model	OS	Color	Engine	Interface	IP rating	Art. code
H-35 EU	Android 11	Black	2D CMOS	Bluetooth, NFC, GPS	65	14978
H-35 TOF *	Android 11	Black	2D CMOS	Bluetooth, NFC, GPS	65	15001 *

Accessories — check our website for all accessories and its compatibility

Standard battery
– Enclosed: yes
– Art. code: 15002

Power Supply
– Enclosed: no
– Art. code: 14681 EU
– Art. code: 14682 US

Pistol grip
– Enclosed: no
– Art. code: 15004

Pistol grip UHF
– Enclosed: no
– 15005 UHF+ batt *
  15020 UHF+Blt+batt *

Battery pistol grip
– Enclosed 15004: no
– Enclosed 15005, 15020: yes
– Art. code: 15006

CRD-35
– Enclosed: no
– 15007 Charger
  15008 Ethernet *
  15009 PG

CRD-35 1x4 battery
– Enclosed: no
– Art. code: 15013 *

CRD-35 1x2 batt PG
– Enclosed: no
– Art. code: 15014 *

CRD-35 MC-4
– 15011 MC-4 *
– 15017 MC-3 + batt *

Power supply CRD
– Enclosed: no
– 15010 CRD
– 15012 MC *

Vehicle cradle
– Enclosed: no
– Art. code: 15021 *

Holster
– Enclosed: no
– Art. code: 15016 *

Rubber boot
– Enclosed: no
– 15022 without pin *
  15015 pin for cradle

Hand strap
– Enclosed: no
– Art. code: 15023

Bumper
– Enclosed: no
– Art. code: 15024

* Subject to minimum order quantities   ** Discontinued, stock is still available

OPH-1005

`1D - Laser`

Main specifications
- Barcode Laser Scanner
- 100 scans/second
- Keypad: 23 keys
- Display: Color, 320 x 240 pixels
- Withstands 1.5 m drop to concrete
- IrDA
- Weight: Ca. 140 g / 4.9 oz (incl. battery)

Model	OS	Color	Engine	Interface	IP rating	Art. code
OPH-1005	Proprietary	Black	Laser	IrDA	54	13036

Accessories

Standard battery
– Enclosed: yes
– Art. code: 12025
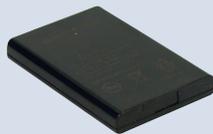
Wrist strap
– Enclosed: yes

CRD-1004
– 12589 (incl. ethernet cable (12607)

CRD-1006
– 13167 (incl. cable USB (10957) RS232 (14273)

CRD Power Supply
– Enclosed: no
– Art. code: 10991

Proprietary Mobile Computers

OPH-3001

`1D - Laser`

Main specifications
- Barcode Laser Scanner
- Keypad: 21 keys
- Display: 320 x 240 pixels
- 100 scans/second
- IrDA
- Mini USB
- Withstands 1.5 m drop to concrete
- Weight: Ca. 156 g / 5.5 oz (incl. battery)

Model	OS	Color	Engine	Interface	IP rating	Art. code
OPH-3001	Proprietary	Black	Laser	IrDA	54	13656

Accessories
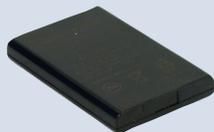
Standard battery – Enclosed: yes – Art. code: 12025	Wrist strap – Enclosed: yes	USB cable – Enclosed: yes

OPL-9815

Main specifications
- Barcode Laser Scanner
- 100 scans/second
- Keypad: 18 keys
- Display: 112 x 64 pixels graphic LCD
- IrDA
- GPS and real time clock
- Bluetooth
- Weight: Ca. 115 g / 4.1 oz (excl. battery)
- survives 1.5 m drops to concrete
- IP 54

Model	OS	Color	Engine	Interface	IP rating	Art. code
OPL-9815	Proprietary	Black	Laser	IrDA, GPS, Bluetooth	54	12963

Accessories

Standard battery
– Enclosed: yes
– Art. code: 12025
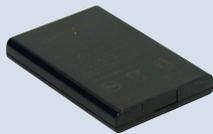
Wrist strap
– Enclosed: yes

CRD-9723RU
– Enclosed: no
– Art. code: 10935
  (incl RS232)

CRD power supply
– Enclosed: no
– Art. code: 10991 +
  11870

CRD USB cable
– Enclosed: no
– Art. code: 10957