

Product Range

2024



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- * Product subject to minimum order quantities
- ** Product discontinued, stock is still available

We Scan, Connect and Communicate



We are Opticon, a Japanese manufacturer, and have been developing barcode scanners since 1976. There's a big chance that, inadvertently, you already know us through our products. You see them everywhere, both here and abroad. From the electronic shelf label at your local supermarket to the scanner used at a Covid test facility. From scanners used by large retail chains to the barcode scanner of parking garages. We are one of the world's key players in the automatic identification market.

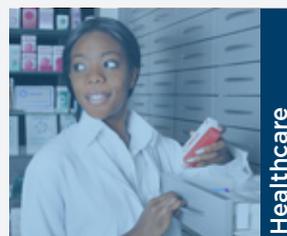
Why our customers choose us

- Being a manufacturer
- Extremely large knowledge base
- Local presence
- In-house service
- Long term availability of products
- Continuity as a company
- Long term partnerships
- Ultra high quality

The highest quality, the best service
For more than 45 years we belong amongst the front runners in scanning solutions. Our barcode scanners and display solutions are amongst the best in the world. And also after completing your project we are there for you globally.

With our helpdesk, supporting you with all your questions. With our technical department for quick, professional repairs. Or with our engineers who like to think along with you about new products and integrated solutions. Thanks to our local presence, both technical and commercial, we are never too far away.

This is what we can do for you
Opticon is the right provider for all your intelligent barcode scanning solutions. No matter which business process or market. We always offer solutions that are tailored to your situation and enjoy the challenge to think along with you.



Healthcare



Hospitality



Postal



Ticketing



Logistics



Retail

Type of Barcodes

1D Barcode

Industrial 2 of 5



Codabar



EAN 13



Code 39



Code 128



GS1 Databar



UPC A



Interleaved 2 of 5

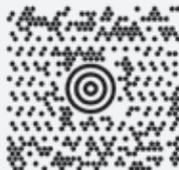


2D Barcode

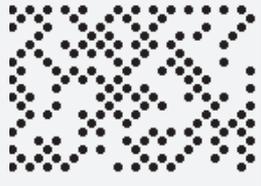
Data Matrix



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

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.



Wireless scanners

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.



Companion scanners

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

1D - CCD



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

1D - CCD



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-50C

1D - CCD



Main specifications

- Barcode CCD Scanner
- Weight: Ca. 145 g / 5.1 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Pistol grip scanner

Stand
- Enclosed: yes



Model	Interface	Color	Stand	AM	IP	Special	Art. code
L-50C-USB-BLK-STD **	USB	Black	Yes, black	No	42	Customizable logo	13750 **
RS232-CABLE-BLK	RS232	Black	--	--	--	--	14001
USB-CABLE-BLK	USB	Black	--	--	--	--	13774

L-46R

1D - Laser



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 *

Cabled Scanners

OPR-2001Z

1D - Laser



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

OPR-3201Z

1D - Laser



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 *

OPL-6845S

1D - Laser



Main specifications

- Barcode Laser Scanner
- Weight: Ca. 75 g / 2.5 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Hand scanner

Stand
- Enclosed: yes



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



Model	Interface	Color	Stand	AM	IP rating	Art. code
OPL-6845S-BLK-USB+STD	USB	Black	Yes, black	No	42	14164
OPL-6845S-WHT-AM-USB+STD	USB	White	Yes, white	Yes	42	14298
RS232-CABLE-BLK-2M	RS232	Black	--	--	--	14160

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

Cabled Scanners

L-250

2D



Main specifications

- 2D CMOS Imager
- Weight: Ca. 112 g / 3.9 oz
- Drop proof: 1.8 m / 6 ft.
- Enhanced motion tolerance
- Ergonomics: Hand scanner

Stand
- Enclosed: no



Model	Interface	Color	Stand	AM	Art. code
L-250-USB	USB	Black	No	No	15138
Stand for L-250	--	Black	Yes, black	--	15068

L-46X

2D



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 *

L-51X

2D



Main specifications

- 2D CMOS Imager
- Weight: Ca. 145 g / 5.1 oz
- Drop proof: 1.5 m / 5 ft.
- Ergonomics: Pistol grip scanner

Stand
- Enclosed: yes



Model	Interface	Color	Stand	AM	IP	Special	Art. code
L-51X-USB-BLK-STD **	USB	Black	Yes, black	No	42	Customizable logo	13957 **
RS232-CABLE-BLK	RS232	Black	--	--	--	--	14001
USB-CABLE-BLK	USB	Black	--	--	--	--	13774

OPI-3601

2D



Main specifications

- 2D CMOS Imager
- Weight: Ca. 85 g / 3.0 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	Special	Art. code
OPI-3601-BLK-USB-HID+STD	USB	Black	Yes, black	No	42	HID	13084
OPI-3601-BLK-RS232+STD *	RS232	Black	Yes, black	No	42	--	13083 *

Presentation Scanners

M-10

2D



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

2D



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

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
- Enclosed: no
- Art. code: 13726



CRD-3301B
- Enclosed: no
- Art. code: 13982 **



Power Supply 6V/2A
- Enclosed: no
- Art. code: 10991



Rechargeable Battery
- Enclosed: yes
- Art. code: 13830



OPA-3201-USB Dongle
- Enclosed: no
- 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
- Enclosed: no
- Art. code: 13726



CRD-3301B
- Enclosed: no
- Art. code: 13982 **



Power Supply 6V/2A
- Enclosed: no
- Art. code: 10991



Rechargeable Battery
- Enclosed: yes
- Art. code: 13830



OPA-3201-USB Dongle
- Enclosed: no
- 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

Companion Scanners

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 *

OPN-3102i

2D



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

2D



Main specifications

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

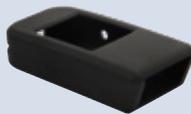
Neck lanyard
- Enclosed: yes



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 than 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

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.



Proprietary Mobile computers

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+Bit+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



OPH-1005

1D - Laser



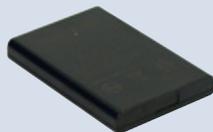
Main specifications

- 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



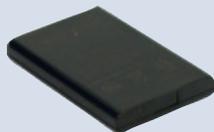
Main specifications

- 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

1D - Laser



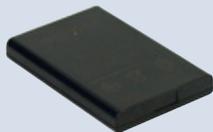
Main specifications

- 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



OPH-5000i

2D



Main specifications

- 2D CMOS Imager
- Keypad: 22 keys
- Display: 128 x 160 pixels graphic LCD
- Wi-Fi
- Bluetooth, NFC
- MFi certified
- Buzzer and vibration
- 3.7V 1,100mAh 4.1Wh
- IP 54
- Weight: Ca. 120 g / 4.2 oz (incl. battery)

Model	OS	Color	Engine	Interface	IP rating	Art. code
OPH-5000i	Proprietary	Black	2D CMOS	Bluetooth, NFC, Wi-Fi	54	14741 *

Accessories

Standard battery
- Enclosed: yes
- Art. code: 13830



Wrist strap +
USB cable
- Enclosed: yes



CRD-5000
- Enclosed: no
- Art. code: 14742 *



CRD power supply
- Enclosed: no
- Art. code: 11052



PX-36

2D



Main specifications

- 2D CMOS Imager
- 60 fps
- Keypad: 18 keys
- Display: 112 x 64 pixels graphic LCD
- IrDA
- Bluetooth
- Weight: Ca. 115 g / 4.1 oz (excl. battery)
- Lithium-Ion, 1,880 mAh battery
- survives 1.5 m drops to concrete
- IP 42

Model	OS	Color	Engine	Interface	IP rating	Art. code
PX-36 **	Proprietary	Black	2D CMOS	IrDA, Bluetooth	54	13749 **

Accessories

Standard battery
- Enclosed: no
- Art. code: 13224



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



OEM & Fixed Mount



Opticon offers a complete range of OEM scan engines, ranging from entry-level cost-effective engines to high-performance 2D imagers. All designed to suit your applications needs and all at the lowest possible cost.

Opticon wants to make your work processes easier and more efficient. Therefore we are designing and producing all OEM barcode scan engines in Japan to the highest possible quality standards. In addition to that Opticon owns all the software and hardware intellectual property of this equipment. Furthermore, Opticon's engineers have years of experience with barcode reading equipment to support you and in the most optimal way.

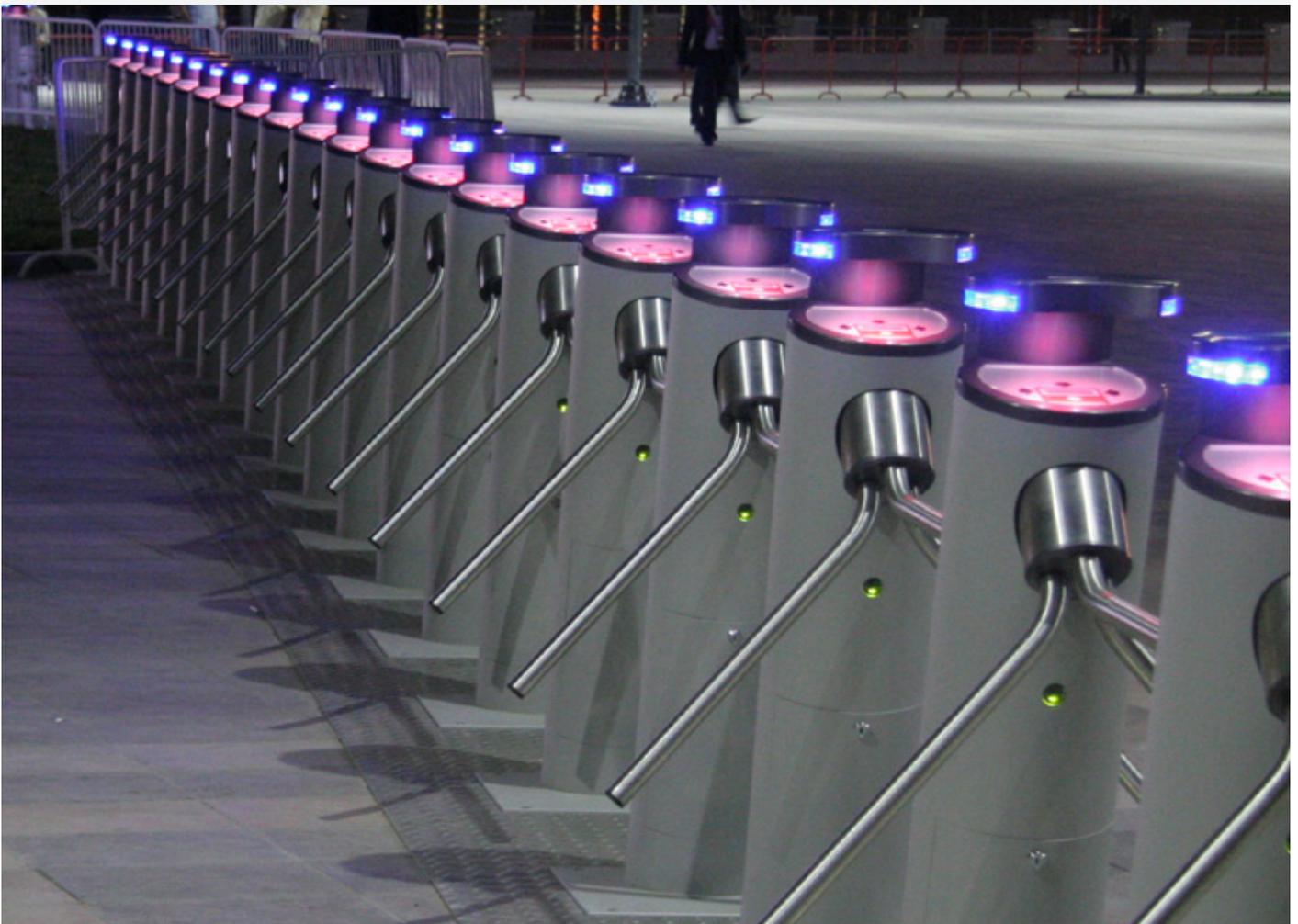
These engines are ideal to integrate into devices or machines that require high-quality barcode reading and decoding equipment.

Such as terminals, POS systems, machines and much more.

Secondly, Opticon has made a group is for fixed mount scanners. These scanners are ideal for situations where you need a barcode engine in a housing to protect them. Such as factories, warehouses, laboratories, robots, and more.

Use our product selector online to select the module that best suits your business. In addition, you can find detailed information about our scan engine technologies.

Opticon also has the MEK-3100 development kit ready for you to start with our engines. If you use this development kit you will have all the cables, screws, FFC's, you need to connect an engine to a computer. Get in contact to start with the integration of your Opticon scan engine.





Our range of OEM & Fixed mount scanners



CCD based modules

CCD modules are linear (1D) 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.

Opticon's CCD modules are low cost, extremely rugged since there are no moving parts, small and have a low power consumption.



Laser based modules

Laser engines are linear (1D) scan modules. They consist of a small semiconductor laser, an optical system 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 Laser modules are low cost, large depth of field, read high-resolution barcodes and low power consumption.



2D CMOS imager modules

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.

Opticon has one of the best range of 2D scan modules, and there is a large variety available for each need.



Fixed mount scanners

Opticon fixed-mount scanners can be used wherever a barcode scanner is needed in a stationary position, such as in vending machines, libraries, retail POS, boarding card scanning, and manufacturing.

A fixed-mount scanner consists of a scan engine, a housing, and a cable. It protects the scan engine from environmental influences such as dust, and provides a means to securely mount the product. This way, the product is easy to install.

MDC-100A / 200A

1D - CCD



Main specifications

- Barcode CCD Scanner
- Scan rate: 300 scans/sec
- MDC-100A:
22.8 x 15.0 x 11.5 mm (wxdxh)
0.90 x 0.59 x 0.45 in (wxdxh)
Weight: Ca. 3.5 g / 0.12 oz
- MDC-200A:
22.8 x 15.0 x 7.5 mm (wxdxh)
0.90 x 0.59 x 0.30 in (wxdxh)
Weight: Ca. 2.6 g / 0.09 oz

Accessories

MEK-3100 testkit
- Enclosed: no
- Art. code: 14057



Model	Engine	Art. code
MDC-100A **	CCD	13349 **
MDC-200A	CCD	13627

MDL-1000

1D - Laser



Main specifications

- Barcode Laser Scanner
- Scan rate: 100 scans/sec
- 28.0 x 18.0 x 7.8 mm (wxdxh)
- 1.10 x 0.71 x 0.31 in (wxdxh)
- Weight: Ca. 10 g / 0.35 oz

Accessories

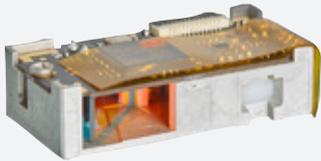
MEK-3100 testkit
- Enclosed: no
- Art. code: 14057



Model	Engine	Art. code
MDL-1000	Laser	11501

MDL-1500

1D - Laser



Main specifications

- Barcode Laser Scanner
- Scan rate: 100 scans/sec
- 28.0 x 14.0 x 8.0 mm (wxdxh)
- 1.10 x 0.55 x 0.32 in (wxdxh)
- Weight: Ca. 3.9 g / 0.13 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
- Art. code: 14057



Model	Engine	Art. code
MDL-1500	Laser	13978

MDL-2001

1D - Laser



Main specifications

- Barcode Laser Scanner
- Scan rate: 100 scans/sec
- 20.4 x 18.0 x 11.2 mm (wxdxh)
- 0.79 x 0.71 x 0.44 in (wxdxh)
- Weight: Ca. 4.7 g / 0.17 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
- Art. code: 14057

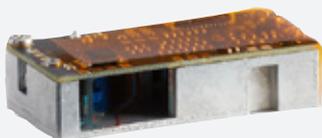


Model	Engine	Art. code
MDL-2001	Laser	12426
MDL-2001 FFC flatcable	--	11438

Scan Engines

MSL-1400

1D - Laser



Main specifications

- Barcode Laser Scanner
- Scan rate: 100 scans/sec
- 28.0 x 14.0 x 7.8 mm (wxdxh)
- 1.10 x 0.55 x 0.31 in (wxdxh)
- Weight: Ca. 3.9 g / 0.14 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
 - Art. code: 14057



Model	Engine	Art. code
MSL-1400	Laser	14861

MDI-4100/4150

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 100 fps
- 25.3 x 21.0 x 10.0 mm (wxdxh)
- 1.00 x 0.83 x 0.39 in (wxdxh)
- Weight: Ca. 5.5 g / 0.19 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
 - Art. code: 14057



Model	Engine	Art. code
MDI-4100	2D CMOS	13950
MDI-4050 *	2D CMOS	14161 *
MDI-4150	2D CMOS	14162
MDI-4150 HD *	2D CMOS	14251 *
MDI-4150 UHD *	2D CMOS	14295 *

MDI-4700

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 120 fps
- Aiming green LED
- 25.3 x 10 x 21 mm
- Weight: Ca. 7 g / 0.24 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
 - Art. code: 14057



Model	Engine	Art. code
MDI-4700	2D CMOS	15149

MDI-5300

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 120 fps
- Red cross laser aiming LED
- 25.3 x 10.8 x 21 mm
- Weight: Ca. 5 g / 0.18 oz

Accessories

- MEK-3100 testkit
- Enclosed: no
 - Art. code: 14057



Model	Engine	Art. code
MDI-5300	2D CMOS	15028

N-250

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 100 fps
- High motion tolerance
- USB Composite device (both serial and HID)
- 38.53 x 16.2 x 24.33 mm / 1.52 x 0.64 x 0.96 in
- Weight: 5.5 g / 0.19 oz

Accessories

MEK-3100 testkit
 - Enclosed: no
 - Art. code: 14057



Model	Engine	Art. code
N-250 * - available soon -	2D CMOS	15181 *

MEK-3100



Main specifications

- FFC cable with contacts on the opposite sides
- FFC cable with contacts on the same side
- RS-232 interface cable
- USB interface cable
- AC adapter with international power plugs
- 2 screws M2x5
- 4 PCB standoffs

Model	Art. code
MEK-3100	14057

NLV-4001

1D - CCD



Main specifications

- Barcode CCD Scanner
- Scan rate: 300 scans/sec
- Case material: ABS
- 33.0 x 41.1 x 24.0 mm (wxdxh)
- 1.30 x 1.62 x 0.94 in (wxdxh)
- IP rate: 65
- RS232, USB (HID/VCP)
- Weight: Ca. 55 g / 1.86 oz (incl. USB cable)

Model	Engine	IP rating	Art. code
NLV-4001-RS232 No Connector *	CCD	65	13934 *
NLV-4001-USB	CCD	65	13935

F-70

1D - CCD



Main specifications

- Barcode CCD Scanner
- Scan rate: 700 scans/sec
- Case material: Sheet metal
- I-type: 47.0 x 55.0 x 20.0 mm
- I-type: 1.85 x 2.17 x 0.79 in
- Weight I-type: Ca. 100 g / 3.5 oz (excl. cable)
- L-type: 55.0 x 52.0 x 20.0 mm
- L-type: 2.17 x 2.05 x 0.79 in
- Weight L-type: Ca. 110 g / 3.9 oz (excl. cable)
- IP rate: 42
- RS232

Accessories

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



Model	Engine	IP rating	Art. code
F-70-I-RS232	CCD	42	13184
F-70-L-RS232	CCD	42	13185

Fixed Mount

NLV-1001

1D - Laser



Main specifications

- Barcode Laser Scanner
- Scan rate: 100 scans/sec
- Case material: ABS
- 30.0 x 43.3 x 20.0 mm (wxdxh)
- 1.18 x 1.70 x 0.79 in (wxdxh)
- IP rate: 43
- RS232, USB (HID/VCP)
- Weight: Ca. 30 g / 1.1 oz (excl. cable)

Accessories

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



Model	Engine	IP rating	Art. code
NLV-1001-RS232	Laser	42	11613
NLV-1001-USB-HID	Laser	42	11614

NLV-3101

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 60 fps
- Case material: ABS
- 41.1 x 33 x 24.0 mm (wxdxh)
- 1.62 x 1.3 x 0.94 in (wxdxh)
- IP rate: 65
- RS232, USB (HID/VCP)
- Weight: Ca. 30 g / 1.06 oz (excl. cable)

Accessories

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



Model	Engine	IP rating	Art. code
NLV-3101-RS232	2D CMOS	65	13091
NLV-3101-USB	2D CMOS	65	13092

NLV-5201

2D



Main specifications

- 2D CMOS Imager
- Scan rate: up to 100 fps
- Case material: Zinc alloy die casting
- 41.1 x 33 x 24.0 mm (wxdxh)
- 1.62 x 1.3 x 0.94 in (wxdxh)
- IP rate: 65
- Loose end (LE)
- Optional: RS-232 connector and power supply (11052)
- Weight: Ca. 125 g / 4.2 oz (excl. cable)

Model	Engine	IP rating	Art. code
NLV-5201-RS232C(LE)	2D CMOS	65	14309
NLV-5201-UD-RS232C(LE)	2D CMOS	65	14265 *
NLV-5201-USB-HID	2D CMOS	65	14483

PR-11

2D



Main specifications

- 2D CMOS Imager
- Omni-directional
- Case material: ABS
- White model antimicrobial
- Scan rate: Up to 120 fps
- 141.4 x 128.8 x 109.0 mm (wxdxh)
- Ergonomics: Passport Reader
- Weight body (excluding cable):
White ca. 575 g / 19.44 oz
Black ca. 545 g / 18.43 oz

Accessories

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



Model	Engine	AM	Art. code
PR-11-BLK-USB	2D CMOS	No	14659
PR-11-WHT-USB	2D CMOS	Yes	14660
RS232-M-11-CABLE-BLK-2.1M	2D CMOS	--	14499



Today's retailer needs to respond quickly and effectively to frequent market changes to optimize and enhance their store operations. Opticon Display Solutions address these critical factors of the process: pricing, promotion and cost.

Price control

Electronic Shelf Label (ESL) is a digital price tag that conveniently presents prices, product details, promotions and images. Use ESL to instantly and accurately execute price changes from a centralized location. ESL ensures that your data is accurate and eliminates price discrepancies between the shelf and the checkout. ESL also improves your customers' experience, reduces checkout time and presents a positive brand image.

Promotional possibilities

Fierce competition requires a strategic pricing policy. ESL and full color displays allow you to set up promotions responsively. For example, if you need to reduce prices to encourage sales and reduce waste on perishable products, you can easily set up a promotion.

Productivity increase

Using Opticon Display Solutions eliminates the need to manually adjust and maintain product prices and information. You can use your staff more efficiently to refill the shop, serve your customers and perform other store operational tasks.

Benefits

- Ensures accurate and reliable pricing
- Enables on-demand, real-time price promotions
- Maximum responsiveness
- Improves margin and increases sales
- Reduces waste and labor costs
- Enhances customer loyalty and satisfaction

How does it work

From your company headquarters or back office, you can easily install, monitor and update Opticon Display Solutions at your local stores. Use the software on your PC or the cloud solution, to create label layouts and save templates. You can also connect the software to all your ERP and data sources.





Our range of Display solutions



Electronic shelf labels

We provide a superior platform that can improve your profitability and therefore enable new customer-facing applications, promotions, loyalty programs, and efficient processes.

Our ESLs are used in the food retail, unmanned shops, point-of-sale, pharmacy, warehouse, and room signage.

Opticon offers two ranges to meet your needs; the traditional EE-range and the powered PE-range.



Mounting

We provide a variety of secure, durable and esthetically pleasing ESL shelf mounting options and accessories. Our broad product range is compatible with the most popular shelving systems. Many of our shelf profiles are lightweight, which supports easy, cost-effective migration from traditional paper labels to digital labels.

In many instances, only the label needs to be changed, which allows for efficient and intelligent shelf management.



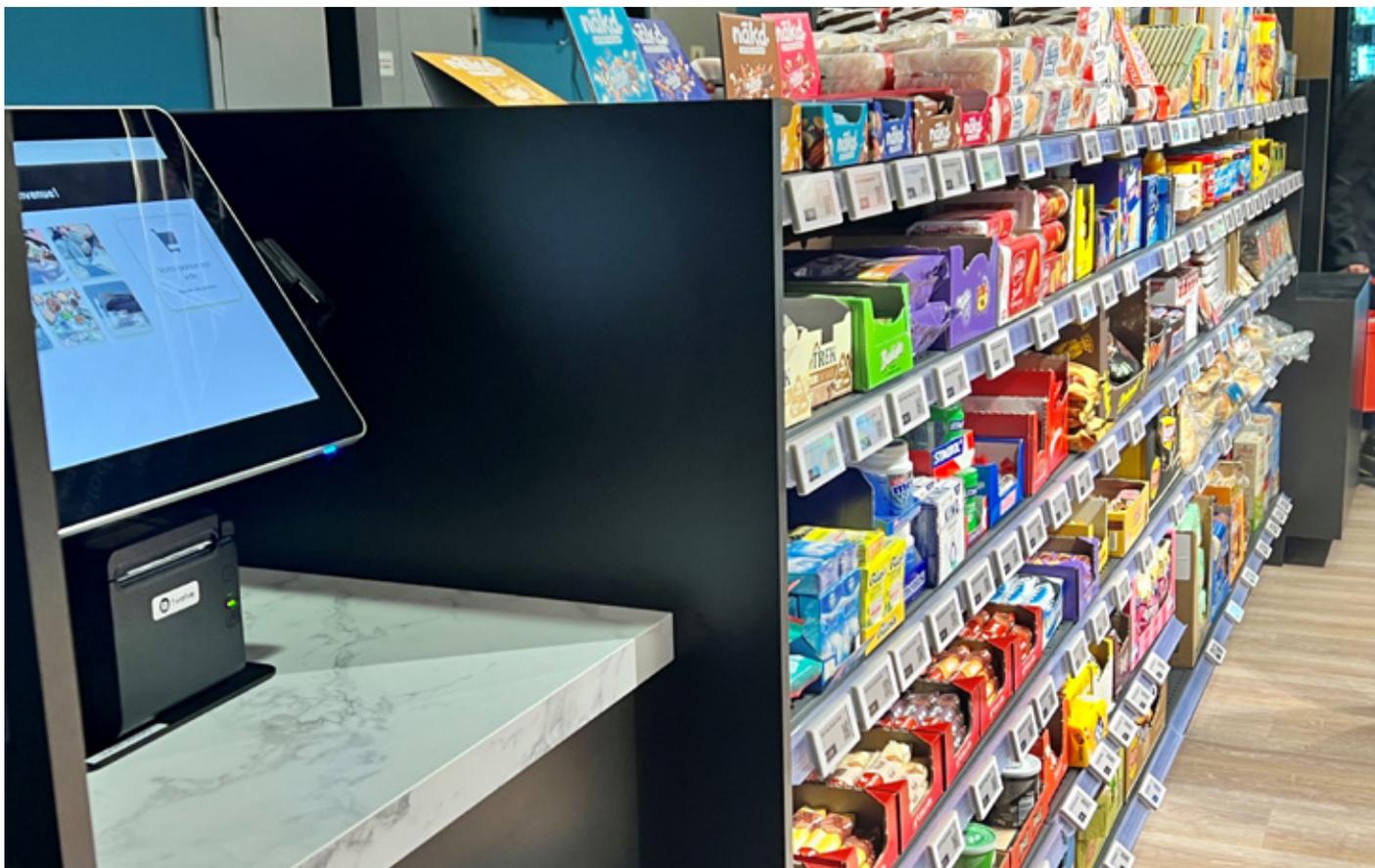
Communication

Opticon's solution includes the necessary hardware and software to communicate and manage with your ESLs.

This system lets you control from a centralized location and implementation of the base station is very simple. All ESLs are connected to the same network and content management system, which is connected to the back office system.

The smart Base Station can even host its own database server, all in one package.

Electronic Shelf Labels



EE-214 BWRY

BWRY



Main specifications

- Display: e-paper b/w/r/y
- Battery: 2x CR2450
- Radio protocol: IEEE 802.15.4
- Number of dots: 212 x 104
- Pixel pitch: 130 dpi
- Dimensions: 69.9 x 34.7 x 11.5 mm

Model	Color	Power	NFC	LED	Sound	Art. code
EE-214BWRY	B/W/R/Y	Battery	No	No	No	15145

EE-293 BWRY

BWRY



Main specifications

- Display: e-paper b/w/r/y
- Battery: 2x CR2450
- Radio protocol: IEEE 802.15.4
- Number of dots: 296 x 128
- Pixel pitch: 112 dpi
- Dimensions: 92.3 x 42.2 x 11.5 mm

Model	Color	Power	NFC	LED	Sound	Art. code
EE-293BWRY	B / W / R / Y	Battery	No	No	No	15176
EE-293R	B / W / R	Battery	No	No	No	14462 *
EE-293R Low temperature *	B / W	Battery	No	No	No	15069 *
EE-293R Passive NFC **	B / W / R	Battery	Passive	No	No	14915 **

EE-420R

BWR



Main specifications

- Display: e-paper b/w/r
- Battery: 2x AAA (incl.)
- Radio protocol: IEEE 802.15.4
- Number of dots: 400 x 300
- Pixel pitch: 120 dpi
- Dimensions: 101.0 x 93.0 x 16.0 mm

Model	Color	Power	NFC	LED	Sound	Art. code
EE-420R	B / W / R	Battery	No	No	No	14053

Electronic Shelf Labels

EE-750R

BWR



Main specifications

- Display: e-paper b/w/r
- Battery: 4x AAA (incl.)
- Radio protocol: IEEE 802.15.4
- Number of dots: 640 x 384
- Pixel pitch: 100 dpi
- Dimensions: 180.0 x 126.0 x 16.0 mm

Model	Color	Power	NFC	LED	Sound	Art. code
EE-750R	B / W / R	Battery	No	No	No	14054

PE-Range *

BW



Main specifications

- Display: e-paper b/w
- Radio protocol: IEEE 802.15.4
- Powered via rail
- NFC
- LED

Model	Color	Power	NFC	LED	Sound	Art. code
PE-152 **	B / W	Powered	Active	Yes	Yes	14302 **
PE-152 **	B / W	Powered	Active A,B&F	Yes	Yes	14692 **
PE-292 **	B / W	Powered	Active A,B&F	Yes	Yes	14690 **
PE-292 low temperature *	B / W	Powered	No	No	No	14571 *
RE-294 *	B / W	Rechargeable	Active	Yes	Yes	14603 *

EBS-40



Main specifications

- ESL Base Station
- The base station provides a connection between the Electronic Shelf Label server and the Electronic Shelf labels so you can easily update them whenever you want.

Power Supply EBS
 - Enclosed: no
 - Art. code: 10991



Ethernet cable
 - Enclosed: no
 - Art. code: 12607



Legacy ESL server
 - Enclosed: no



Model

EBS-40

Art. code

13665

EBS-50



Main specifications

- Smart ESL base station
- Communicates with your wireless ESLs, hosts the ESL Server Application and can even host its own database server. The EBS-50 is a combination of a Linux microcomputer and a Base Station.

Power supply EBS
 - Enclosed: no
 - Art. code: 14845



Ethernet cable
 - Enclosed: no
 - Art. code: 12607



ESL Web server
 - Enclosed: no



Model

EBS-50

Art. code

14828

Software



ESL (Web) Server Software

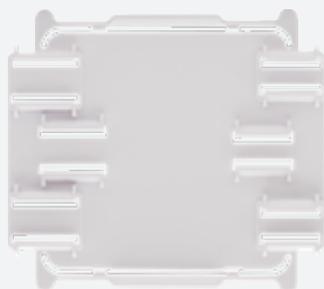
The server software makes it possible to connect any smart device on the same network as the EBS-50 to use its browser to reach the ESL Server Web Interface and manage the labels. No mouse, keyboard or monitor is required.



ESL Cloud Dashboard

You can see the statuses of all your EBS-50's on a centralized overview page. Simply instruct your EBS-50 to send its local system status (as seen on the dashboard landing page) to the Cloud Dashboard.

Accessories



Mounting options

We provide a variety of secure, durable and esthetically pleasing ESL shelf mounting options and accessories. Our broad product range is compatible with the most popular shelving systems. Many of our shelf profiles are lightweight, which supports easy, cost-effective migration from traditional paper labels to e-paper labels. In many instances, only the label needs to be changed, which allows for efficient and intelligent shelf management.



Accessories brochure

For the complete range of accessories for the EE and PE range please check our "EE Range ESL Folder" and "PE Range ESL Folder" on our website.



≡ OPTICON

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