IMPACT+ *OCR* is the new Datalogic innovative solution for robust and effective Optical Character Recognition (e.g. expiration date, lot number) for the Food & Beverage industry.

The new Datalogic P19 Smart Camera is powered by IMPACT+ OCR, providing a dedicated User Operator Interface which easily performs multiple OCR inspections.

The P19 Smart Camera is an embedded standalone device that features a high resolution CMOS sensor with 1280x1024 pixels at up to 60fps.

Lenses and illuminators are fully interchangeable and can be mounted and replaced by the user. Five focal lengths and nine lighting options result in 45 different combinations delivering outstanding installation flexibility while offering superior image acquisition capabilities.

With compact dimensions and rotating connectors, the P19 can be installed even in extremely narrow spaces. The IP67 rated metal housing guarantees maximum protection in the most harsh factory environments containing dust, water and oil.



||経過機器

HIGHLIGHTS

- Dedicated OCR user interface
- Fully integrated ultra-compact device
- Rotating connectors for 0°& 90° form factors
- Rugged IP67 rated housing
- 1.3 megapixel camera resolution
- Interchangeable lenses, illuminators and filters
- Built-in Serial and Ethernet interfaces

APPLICATIONS

- Lot and batch number reading
- Expiration date verification
- Serial number traceability
- Thermal transfer printing verification

FOCUSING ON APPLICATIONS

FOOD AND BEVERAGE

Thermal transfer printing verification



Lot number and best before date OCR reading





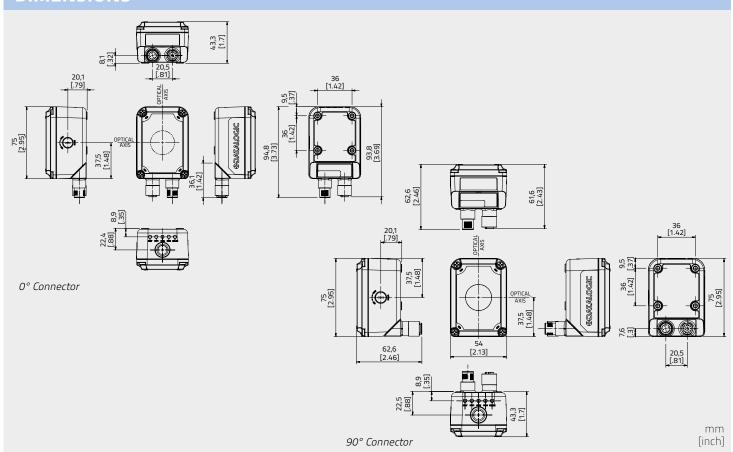
IMPACT+ OCR



TECHNICAL DATA

	P19		
Resolution	SXGA (1280 x 1024 pixels)		
Imager type	CMOS global shutter		
Pixel size	5.3 um		
Imager size	1/1.8"		
Frame rate	60 fps		
Processor	660 MHz DSP		
Dedicated I/O	1 IN		
Configurable I/O	3 OUT		
I/O type	Isolated INPUT Non-isolated OUTPUT		
External button	Yes		
Ethernet	10/100 Mbit/s		
RS-232 serial	Yes		
OCR recipes	Up to 10		
Lens options	6mm / 9mm / 12mm / 16mm / 25 mm		
Illuminator options	Wide angle 8 LEDs: Red, White, IR, Blue, Red with polarizer, White with polarizer Multi-chain 50 LEDs: Red, White, Blue		
Power requirements	10 – 30 Vdc		
Protection class	IP67		
Dimensions	95 x 54 x 43 mm (3.7 x 2.1 x 1.7 in.) – Connector @ 0° 75 x 54 x 62 mm (3.0 x 2.1 x 2.4 in.) – Connector @ 90°		
Case material	Aluminium, plastic protective window cover		
Operating temperature	0 to 50 °C (32 to 122 °F)		
Storage temperature	-20 to 70 °C (-4 to 158 °F)		
Humidity	90% non condensing		
Certifications	CE, CSA		

DIMENSIONS



IMPACT+ OCR



LIGHTING

AVAILABLE ILLUMINATORS

Nine different interchangeable lighting solutions are available:

WIDE ANGLE













WHITE

BLUE

INFRARED

RED WITH POLARIZER

WHITE WITH POLARIZER

MULTI-CHAIN





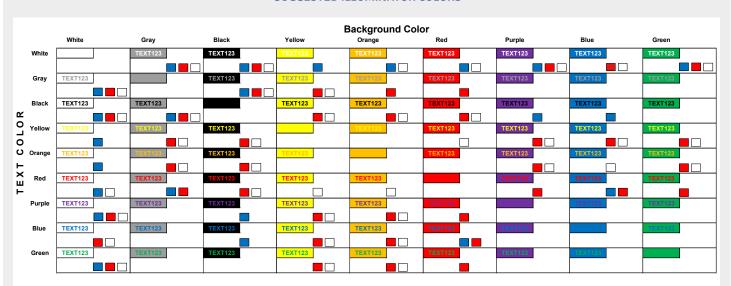






BLUE

SUGGESTED ILLUMINATOR COLORS



The matrix above represents a recommendation for selecting the optimum illumination color. Datalogic recommends always testing the illuminator on products to be inspected.



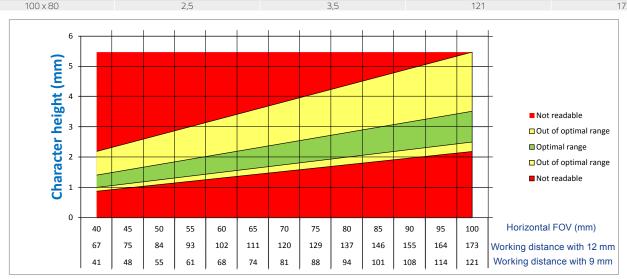
For glossy material inspections an illuminator with polarizer is recommended. The result of an inspection using an illuminator with polarizer on a glossy surface is shown below:





OPTICS

Field of View (XxY) mm	MIN Character Height (mm)	MAX Character Height (mm)	Working Distance (mm)	
			9 mm lens	12 mm lens
40 x 32	1,0	1,4	41	67
45 x 36	1,1	1,6	48	75
50 x 40	1,3	1,8	55	84
55 x 44	1,4	1,9	61	93
60 x 48	1,5	2,1	68	102
65 x 52	1,6	2,3	74	111
70 x 56	1,8	2,5	81	120
75 x 60	1,9	2,6	88	129
80 x 64	2,0	2,8	94	137
85 x 68	2,1	3,0	101	146
90 x 72	2,3	3,2	108	155
95 x 76	2,4	3,3	114	164
100 v 00	2 E	2 E	121	170





USER AND OPERATOR INTERFACES

P19 features the intuitive and easy-to-use **IMPACT+** *OCR* User Interface for creating multiple inspection recipes for OCR and code reading applications. **IMPACT+** *OCR* includes the following panels:

Image Setup

A quick way of choosing the best image acquisition settings (from 4 to 16 different self-regulating combinations of shutter time and gain).



Anchor Point

An easy way to set a reference point for OCR reading (edge, shape or code location).



Reading tools

A combination of OCR and code reader tools for simultaneous multiple readings.



Input/Output

A verify string or a digital signal can be used to input the reference string. Messages and digital outputs can be sent quickly to other devices.



Monitor

IMPACT+ *OCR* includes a straightforward Operator Interface which shows current readings (code and OCR) and easily allows operators to load any configured inspection recipe.



IMPACT+ OCR



MODEL SELECTION AND ORDER INFORMATION

MODEL	ORDER N°
Camera, IMPACT P19, Grayscale, 1280x1024, 60 FPS, 1/1.8" CMOS, OCR	937700009

ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	ORDER N°				
	ILLUMINATORS					
LT-050 - Red Wide Angle Illuminator	Lighting, P-Series, LT-050, Wide angle 8 LEDs, red	95A901780				
LT-055 - White Wide Angle Illuminator	Lighting, P-Series, LT-055, Wide angle 8 LEDs, white	95A901790				
LT-053 - Blue Wide Angle Illuminator	Lighting, P-Series, LT-053, Wide angle 8 LEDs, blue	95A901800				
LT-052 - IR Wide Angle Illuminator	Lighting, P-Series, LT-052, Wide angle 8 LEDs, IR	95A901810				
LT-057 - Red Multi Chain Illuminator	Lighting, P-Series, LT-057, Multi-chain 50 LEDs, red	95A901820				
LT-059 - White Multi Chain Illuminator	Lighting, P-Series, LT-059, Multi-chain 50 LEDs, white	95A901830				
LT-058 - Blue Multi Chain Illuminator	Lighting, P-Series, LT-058, Multi-chain 50 LEDs, blue	95A901840				
LT-051 - Red Wide Angle Illuminator with Polarizer	Lighting, P-Series, LT-051, Wide angle 8 LEDs, red with polarizer	95A901870				
LT-056 White Wide Angle Illuminator with Polarizer	Lighting, P-Series, LT-055, Wide angle 8 LEDs, white with polarizer	95A901890				
	LENSES					
Micro Video Lens, 6mm	Micro Video Lens, P-Series, 6mm	95A901730				
Micro Video Lens, 9mm	Micro Video Lens, P-Series, 9mm	95A901740				
Micro Video Lens, 12mm	Micro Video Lens, P-Series, 12mm	95A901750				
Micro Video Lens, 16mm	Micro Video Lens, P-Series, 16mm	95A901760				
Micro Video Lens, 25mm	Micro Video Lens, P-Series, 25mm	95A901770				
Micro Video Lens with IR Filter, 25mm	Micro Video Lens, P-Series, 25mm with IR bandpass filter	95A901860				
IR Bandpass Filter, P-Series	Filter, P-Series, IR bandpass filter	95A901850				
YAG Cut Filter, P-Series	Filter, P-Series, YAG cut filter	95A901880				
I/O CABLES						
CAB-DS01-S M12-IP67 TO CBX 1M	Cable, PWR & I/O, CAB-DS01-S, P-Series to CBX (DB25), 1 meter	93A050058				
CAB-DS03-S M12-IP67 TO CBX 3M	Cable, PWR & I/O, CAB-DS03-S, P-Series to CBX (DB25), 3 meters	93A050059				
CAB-DS05-S M12-IP67 TO CBX 5M	Cable, PWR & I/O, CAB-DS05-S, P-Series to CBX (DB25), 5 meters	93A050060				
CAB-DS10-S M12-IP67 TO CBX 10M	Cable, PWR & I/O, CAB-DS10-S, P-Series to CBX (DB25), 10 meters	93A051390				
	ETHERNET CABLES					
CAB-ETH-M01 M12-IP67 ETH. CAB. (1M)	Cable, Ethernet, CAB-ETH-M01 M12-IP67 to RJ45, 1 meter	93A051346				
CAB-ETH-M03 M12-IP67 ETH. CAB. (3M)	Cable, Ethernet, CAB-ETH-M03 M12-IP67 to RJ45, 3 meters	93A051347				
CAB-ETH-M05 M12-IP67 ETH. CAB. (5M)	Cable, Ethernet, CAB-ETH-M05 M12-IP67 to RJ45, 5 meters	93A051348				
CAB-ETH-M10 M12-IP67 ETH. CAB. (10M)	Cable, Ethernet, CAB-ETH-M10 M12-IP67 to RJ45, 10 meters	93A051391				
	I/O BOARDS					
Terminal block, DB25 Female	I/O Board, A30/T4x, Female DB25, DIN Rail Mountable	95A906346				
CBX500 CONNECTION BOX MODULAR	I/O Board, A30/T4x, CBX500 CONNECTION BOX MODULAR	93A301068				
CBX800 GATEWAY	I/O Board, A30/T4x, CBX800 GATEWAY	93A301077				
BA100 DIN RAIL ADAPTERS	BA100 DIN RAIL ADAPTERS	93ACC1821				
BA200 BOSCH ADAPTERS	BA200 BOSCH ADAPTERS	93ACC1822				

Rev. 02, 08/2015