

Introduction

This condensed guide applies to the following variants of the **SMARTCAMERA**:

Order code	Product name	Description
BVS0029	BVS SC-M1280Z00-30-010	SMARTCAMERA Ident monochrome ProfiNet / EtherNet/IP + IO-Link
BVS002A	BVS SC-M1280Z00-30-000	SMARTCAMERA monochrome PROFINET / EtherNet/IP + IO-Link
BVS002C	BVS SC-M1280Z00-07-000	SMARTCAMERA monochrome IO
BVS002F	BVS SC-C1280Z00-30-000	SMARTCAMERA color PROFINET / EtherNet/IP + IO-Link
BVS0033	BVS SC-M1280Z00-30-020	SMARTCAMERA HDevelop monochrome PROFINET / EtherNet/IP + IO-Link

These Quick Start instructions apply only to the operation of the **SMARTCAMERA** up to opening the BVS Cockpit configuration interface. At that point, you have access to the detailed operating instructions for the camera as well as to BVS Cockpit. Both set of instructions are also located on www.balluff.com



Note

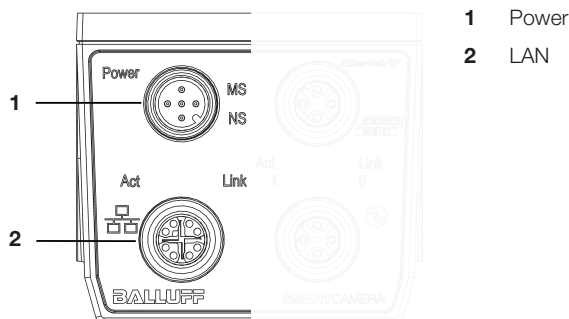
Safe operation requires that the operating instructions for the **SMARTCAMERA** and the warning and safety instructions it contains must be read and observed.



Note

The product contains programs covered under GPL. The source code can be downloaded from the Balluff homepage www.balluff.com in the product download section.

Connections



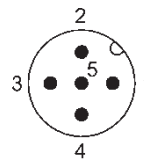
Connection Function

Power	Voltage supply of SMARTCAMERA two freely configurable I/O signals are also available.
LAN	Integrates the SMARTCAMERA in a local network.

Pin assignment

Power

5-pin M12 plug, A-coded



Pin	Signal	Function
1	+24V _{DC}	Supply voltage
2	I/O 0	Input/output
3	GND	Ground
4	I/O 1	Input/output
5	Not used	None. Pin may not be used.

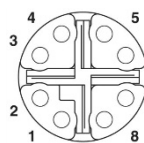


Note

The digital sensor inputs correspond to the guideline concerning inputs, EN 61131-2, Type 3. The maximum load on any output is 100 mA. The total current of the module must not exceed 4 A per pin.

LAN (Gigabit Ethernet)

8-pin M12 socket, X-coded



Pin	Signal	Function
1	BI_DA+	Bidirectional data, Pair A +
2	BI_DA-	Bidirectional data, Pair A -
3	BI_DB+	Bidirectional data, Pair B +
4	BI_DB-	Bidirectional data, Pair B -
5	BI_DD+	Bidirectional data, Pair D +
6	BI_DD-	Bidirectional data, Pair D -
7	BI_DC-	Bidirectional data, Pair C -
8	BI_DC+	Bidirectional data, Pair C +

Startup



Note

On delivery, the **SMARTCAMERA** is ready for operation. The device's firmware is subject to continuous revision and increases the performance of the device.

The current firmware version is located on www.balluff.com in the product download section.

Besides the SMARTCAMERA, the following is required:

- **Power cable (M12, 2 meters)**
Type des.: BCC M415-0000-1A-003-PX0434-020
Ordering code: BCC032F
- **Netzteil 24 V**
= 24 V ± 20 % LPS Class 2
- **LAN-Kabel Gigabit Ethernet**
Type des.: BCC M418-E818-8X0-723-PS58N9-020
Ordering code: BCC0HZK
Requirements: at least category 5e in accordance with EIA/TIA-568. Transfer in accordance with 1000BASE-T/100BASE-TX/10BASE-T is being supported.

Startup (continued)

– PC with web browser

Google Chrome version 32.0, Mozilla Firefox version 24.0, Microsoft Internet Explorer version 11 and above, Microsoft Edge version 40 and above.



Note

JavaScript must be enabled in the web browser.

Step 1: Establishing a network connection with the SMARTCAMERA

- ▶ Connect the **SMARTCAMERA** via the LAN port with the network.

Depending on the network topology between computer and **SMARTCAMERA**, different network settings must be made on the computer. The **SMARTCAMERA** is shipped in DHCP mode.

In general, the network configuration of your computer is set to *Obtain IP address automatically*. For the firewall setting, Port 80 should be enabled.

The following network structures are possible:

- **SMARTCAMERA** and PC are connected directly via a LAN cable.
IP addresses are set automatically.
- **SMARTCAMERA** and PC are in the same subnet of a local network and a DHCP server is available for automatic IP assignment.
IP addresses are set automatically.



Note

The connection via DHCP may take some time.

Step 2: Switching on the SMARTCAMERA

- ▶ Now connect the power supply at the **Power** port with the power supply (24 V).
The SMARTCAMERA starts up and is operational after approx. 30 seconds.

The **SMARTCAMERA** opens the most recently opened inspection program and is in the same process state it occupied at switch-off.

Step 3: Opening the BVS Cockpit web interface

The **SMARTCAMERA** is being configured via the BVS Cockpit.

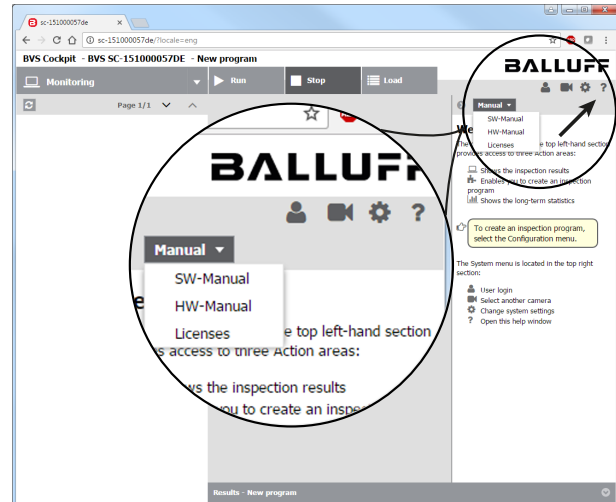
The web interface is being opened and operated via web browser.

1. Record the serial number provided on the nameplate of the **SMARTCAMERA**.
2. Open the web browser and enter the URL: `http://sc-serialnumber`. Ersetzen Replace *serial number* with the number read in step 1 on the nameplate (e.g. 150800015de).
3. Confirm the entry.
The configuration interface is being opened.

Startup (continued)

Step 4: Open the operating instructions

1. Click on the ? symbol on the icon bar at the top right.



2. Click on the Manual tab and select Hardware Manual to display the operating instructions for the **SMARTCAMERA**.



Note

The manuals for the **SMARTCAMERA** and for BVS Cockpit are also located on www.balluff.com.