NEURO CHECK

Industrial Vision Systems

Product Catalog
2021

This product catalog is valid as of February, 2021.
All previous product catalogs cease to be valid.

Subject to changes and errors.

Table of contents

NeuroCheck Software

NeuroCheck Version 6.2

NC-62S-PRE

NeuroCheck V 6.2 Premium Edition (USB)
Developer Edition for interactive development
and operation of vision applications including
programming interface.

The universal application software for industrial vision
systems for developing visual inspection systems for
all areas of manufacturing.
+ Interactive language switching at runtime.
+ Graphical user interface for check-routine development.
+ Formula editor to calculate and modify parameters and result values.
+ Integrated device manager for 1D, 2D, 3D-cameras and industrial bus
communications.
+ Graphical tools for automatic mode screen design.
+ Automatic shop-floor operation with process communication.
+ Powerful and fast image processing algorithms.
+ Programming interface to develop and integrate plug-in functions.

The Premium Edition also includes these additional licenses:
+ NcFmtCnv.NeuroCheck.CustomFile.NET.dll
+ PI_HalconWrapper.NET.dll
+ PI_CodeReaderXNC.NET.dll
+ PI_ContourMatchXNC.NET.dll.

Please note that the hardware key (dongle) constitutes the value of the
purchased program.

Item No.	Description

NC-62S-PRO

NeuroCheck V 6.2 Professional Edition (USB)
Developer Edition for interactive development
and operation of vision applications.

The universal application software for industrial vision
systems for developing visual inspection systems for
all areas of manufacturing.
+ Interactive language switching at runtime.
+ Graphical user interface for check-routine development.
+ Formula editor to calculate and modify parameters and result values.
+ Integrated device manager for 1D, 2D, 3D-cameras and industrial bus
communications.
+ Graphical tools for automatic mode screen design.
+ Automatic shop-floor operation with process communication.
+ Powerful and fast image processing algorithms.

The Professional Edition also includes these additional licenses:
+ NcFmtCnv.NeuroCheck.CustomFile.NET.dll
+ PI_HalconWrapper.NET.dll
+ PI_CodeReaderXNC.NET.dll
+ PI_ContourMatchXNC.NET.dll.

Please note that the hardware key (dongle) constitutes the value of the
purchased program.

NC-62S-RT

NeuroCheck V 6.2 Runtime Edition (USB)
Runtime Edition for a completely configured application.

The universal application software for industrial vision systems.
The Runtime Edition comprises the entire image processing functionality
of the Professional or Premium Edition excluding manual mode for
configuration applications.
+ Interactive language switching at runtime.
+ Automatic shop-floor operation with process communication.
+ Powerful and fast image processing algorithms.

Please note that the hardware key (dongle) constitutes the value of the
purchased program.

Multi license levels

Please note:

- When using these software license levels, you can operate up to four parallel NeuroCheck software instances on one computer with each instance processing one NeuroCheck project. Thus you can run several, completely independent and non-synchronized image processing systems on a single computer.

NC-62M-PRE

NeuroCheck V 6.2 Premium Multi Edition (USB)
Developer Edition for interactive development and
parallel operation of multiple applications on one computer,
including programming interface.

The universal application software for industrial vision systems for developing visual inspection systems for all areas of manufacturing.
+ Interactive language switching at runtime.
+ Graphical user interface for check-routine development.
+ Formula editor to calculate and modify parameters and result values.
+ Integrated device manager for 1D, 2D, 3D-cameras and industrial bus communications.
+ Graphical tools for automatic mode screen design.
+ Automatic shop-floor operation with process communication.
+ Powerful and fast image processing algorithms.
+ Programming interface to develop and integrate plug-in functions.

The Premium Edition also includes these additional licenses:
+ NcFmtCnv.NeuroCheck.CustomFile.NET.dll
+ PI_HalconWrapper.NET.dll
+ PI_CodeReaderXNC.NET.dll
+ PI_ContourMatchXNC.NET.dll.

Please note that the hardware key (dongle) constitutes the value of the purchased program.

NC-62M-RT

NeuroCheck V 6.2 Runtime Multi Edition USB)
Runtime Edition for multiple completely configured applications on one computer.

The universal application software for industrial vision systems.
The Runtime Edition comprises the entire image processing functionality
of the Professional or Premium Edition excluding manual mode for configuration applications.
+ Interactive language switching at runtime.
+ Automatic shop-floor operation with process communication.
+ Powerful and fast image processing algorithms.

Please note that the hardware key (dongle) constitutes the value of the purchased program.

Upgrades

Please note that after applying a NeuroCheck 6.2 license upgrade there is no compatibility with older NeuroCheck 5.1 installations.
The 6.2 dongle will not be accepted by a NeuroCheck installation of version 5.1 older than service pack 11, it will only run in Demo mode!

Item No.	Description
NC-62-UPDATE/PRE	**Upgrade NeuroCheck V6.1 Premium to V6.2 Premium**
NC-62-UPDATE/PRO	**Upgrade NeuroCheck V6.1 Professional to V6.2 Professional**
NC-62-UPDATE/RT	**Upgrade NeuroCheck V6.1 Runtime to V6.2 Runtime**
NC-62-UPDATE/P-M	**Update NeuroCheck V6.1 Premium Multi to V6.2 Premium Multi**
NC-62-UPDATE/R-M	**Update NeuroCheck V6.1 Runtime Multi to V6.2 Runtime Multi**
NC-62-UPGRADE/01	**Upgrade NeuroCheck V6.2 Runtime to Professional**
NC-62-UPGRADE/02	**Upgrade NeuroCheck V6.2 Runtime to Premium**
NC-62-UPGRADE/03	**Upgrade NeuroCheck V6.2 Professional to Premium**
NC-62-UPGRADE/04	**Upgrade NeuroCheck Version 6.2 Runtime to Runtime Multi-Edition**
NC-62-UPGRADE/05	**Upgrade NeuroCheck V6.2 Premium to Premium Multi-Edition**

Plug-in extensions (extra licensing)

Please note:

- **Plug-in software extensions listed in this section are licensed for single use on one computer only and therefore are bound to a specific NeuroCheck license.**

- **Please note that for creation of a check routine containing plug-in check functions a NeuroCheck 6.2 Premium Edition is required.**

NC-3420/U-F   **PI_ContourMatch.NET.dll**

This NeuroCheck 6.2 plug-in contains a contour based search algorithm to find patterns (models) within an image using the external library MIL 10.0. For details please refer to help file PI_ContourMatch.NET.chm.

NC-3430/U-F   **PI_CodeReader.NET.dll**

This NeuroCheck 6.2 plug-in is used to read several 2D codes and 1D bar codes using the external library MIL 10.0. For details please refer to help file PI_CodeReader.NET.chm.

NC-3440-F   **PI_HalconWrapper.NET.dll**

This NeuroCheck 6.2 plug-in is used to execute HDevelop programs for the external HALCON library. It is possible to use objects from the NeuroCheck data tray and register cells as input or output for the programs. For details please refer to help file PI_HalconWrapper.NET.chm.
(already included in the Professional and Premium Edition)

NC-3450-F   **PI_LensFocusControl.NET.dll**

This NeuroCheck 6.2 plug-in allows to change the focus value of a Optotune's electrically tunable lense dynamically. For details please refer to help file PI_LensFocusControl.NET.chm.

Driver and data format converter extensions (extra licensing)

Please note:

- **Software extensions listed in this section are licensed for single use
  on one computer only and therefore are bound to a specific NeuroCheck license.**

- **Please note that for configuration of hardware drivers and data format converters
  a NeuroCheck 6.2 Professional Edition is required.**

Item No.	Description
NC-3461-F	**Nc3D.NeuroCheck.EN.dll:** **This NeuroCheck 6.2 hardware driver integrates selected models of the "N" series stereo 3D cameras of manufacturer Ensenso as a 3D camera device in NeuroCheck software.**
NC-3462-F	**Nc3D.NeuroCheck.Generic.dll:** **This NeuroCheck 6.2 hardware driver integrates various 3D cameras of selected manufacturers as a 3D camera device in NeuroCheck software.**
NC-3435-F	**NcFb.InterComm.NET.dll:** **NeuroCheck 6.2 driver for interprocess-communication + between multiple NeuroCheck instances on the same PC or over the network + between NeuroCheck and NCRoboDirector** **For details please refer to help file NcFb.InterComm.NET.chm.**
NC-3443-F	**NcFmtCnv.NeuroCheck. DatabaseStandard.NET.dll** **This NeuroCheck 6.2 Data Format Converter is used to connect and exchange data from and to a local database using SQL statements.**
NC-3444-F	**NcFmtCnv.NeuroCheck. FieldbusFlowControl.NET.dll** **This NeuroCheck 6.2 Data Format Converter contains a special sequence control system that allows starting a sequence of check routine executions including type changes by a single start signal from field bus.**

Item No.	Description
NC-3445-F	**NcFmtCnv.NeuroCheck. SerialFlowControl.NET.dll** **This NeuroCheck 6.2 Data Format Converter contains a special sequence control system that allows starting a sequence of check routine executions including type changes by a single start signal from a serial device (RS232, TCP/IP).**
NC-3442-F	**NcFmtCnv.NeuroCheck. CustomFile.NET.dll** **This NeuroCheck 6.2 Data Format Converter writes data into a readable text file (TXT, XML or HTML files for instance) in a custom file format. The file format is defined as template file using place holders.**
NC-3446-F	**NcFmtCnv.NeuroCheck.OPCUA.NET.DLL** **This NeuroCheck 6.2 Data Format Converter acts as a OPC UA Client application and allows data transfer between NeuroCheck and a OPC UA Server.** **For details please refer to help file** **NcFmtCnv.NeuroCheck.OPCUA.UI.NET.chm.**

Plug-in extensions (products)

Please note:

- **Plug-in software extensions listed in this section may be used several times in different projects.**

- **Please note that for creation of a check routine containing plug-in check functions a NeuroCheck 6.2 Premium Edition is required.**

NC-3494

PI_Distortion.NET.dll

This NeuroCheck 6.2 plug-in contains functions to determine the geometric distortion in an image and minimizes the distortion like radial lens distortion or perspective by transforming the image. For details please refer to help file PI_Distortion.NET.chm.

NC-3488

PI_CoordinateTransformation.NET.dll

This NeuroCheck 6.2 plug-in allows to perform a two-dimensional coordinate transformation for the center points of objects found in the current image. For details please refer to help file PI_CoordinateTransformation.NET.chm.

NC-3482

PI_RoiTools.NET.dll

This NeuroCheck 6.2 plug-in contains different plug-in check functions for creation or modification of list of ROIs. For details please refer to help file PI_RoiTools.NET.chm.

NC-3480

PI_ImageTools.NET.dll

This NeuroCheck 6.2 plug-in contains different plug-in check functions for creation or modification of images. For details please refer to help file PI_ImageTools.NET.chm.

NC-3481

PI_MeasTools.NET.dll

This NeuroCheck 6.2 plug-in contains different plug-in check functions for creation or modification of measurement lists. For details please refer to help file PI_MeasTools.NET.chm.

Item No.	Description
NC-3471	**PI_Gauge.NET.dll** **This NeuroCheck 6.2 plug-in is used to gauge a part of an object contour with a special calliper rule. For details please refer to help file PI_Gauge.NET.chm.**
NC-3473	**PI_ManualInput.NET.dll** **This NeuroCheck 6.2 plug-in contains plug-in check functions which allow a synchronous user input of data in automatic mode. For details please refer to help file PI_ManualInput.NET.chm.**
NC-3496	**PI_DataRegister.NET.dll** **This NeuroCheck 6.2 plug-in contains different plug-in check functions for modification or special use cases of data register cells. For details please refer to help file PI_DataRegister.NET.chm.**
NC-3475	**PI_FileManagement.NET.dll:** **This NeuroCheck 6.2 plug-in contains functions to manage files on hard disc and network storages, for instance copy, move, zip and delete operations. For details please refer to help file PI_FileManagement.NET.chm.**

Gigabit-Ethernet Area-Scan Cameras (monochrome/color)

NCLT-50C.I

10-GigE Area Scan Camera NCLT-50C.I   *NEW!*

C-Mount
2/3″-CMOS sensor, progressive scan, color
Resolution: 2448 × 2048 pixels
Pixel size: 3.45 µm x 3.45 µm
Frame rate: max. 163 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• external: U: 12 … 24 V DC, P: 10.3 W @ 12 V DC
• PoE: not supported
IOs: 2 digital Inputs and 4 digital Outputs
(continuously max. 1.5 A; PWM max. 2.5 A)
Lens control for Corning Varioptic
Dimensions (WxHxD in mm): 60 x 60 x 99,7
((Lens tube is an optional accessory)

NCCG-13M.I

GigE Area Scan Camera NCCG-13M.I

C-Mount
1/2″-CMOS sensor, progressive scan, monochrome
Resolution: 1280 × 1024 pixels
Pixel size: 4,8 µm x 4,8 µm
Frame rate: max. 94 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,0 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-13C.I

GigE Area Scan Camera NCCG-13C.I

C-Mount
1/2″-CMOS sensor, progressive scan, color
Resolution: 1280 × 1024 pixels
Pixel size: 4,8 µm x 4,8 µm
Frame rate: max. 94 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,0 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

Item No.	Description

NCCG-15M.I

GigE Area Scan Camera NCCG-15M.I

C-Mount
1/2.9""-CMOS sensor, progressive scan, monochrome
Resolution: 1440 × 1080 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 121 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,0 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-15C.I

GigE Area Scan Camera NCCG-15C.I

C-Mount
1/2.9""-CMOS sensor, progressive scan, color
Resolution: 1440 × 1080 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 121 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,0 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-32M.I

GigE Area Scan Camera NCCG-32M.I

C-Mount
1/1,8"-CMOS sensor, progressive scan, monochrome
Resolution: 2048 × 1536 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 39 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,3 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 2,9 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

Item No.	Description

NCCG-32C.I

GigE Area Scan Camera NCCG-32C.I
C-Mount
1/1,8″-CMOS sensor, progressive scan, color
Resolution: 2048 × 1536 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 39 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,4 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,1 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-51M.I

GigE Area Scan Camera NCCG-51M.I

C-Mount
2/3″ CMOS sensor, progressive scan, monochrome
Resolution: 2448 x 2048 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 23 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,3 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,1 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-51C.I

GigE Area Scan Camera NCCG-51C.I

C-Mount
2/3″ CMOS sensor, progressive scan, color
Resolution: 2448 x 2048 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 23 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,0 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

Item No.	Description

NCCG-124M.I

GigE Area Scan Camera NCCG-124M.I

C-Mount
1,1″-CMOS sensor, progressive scan, monochrome
Resolution: 4096 × 3000 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 10 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,5 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,2 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

NCCG-124C.I

GigE Area Scan Camera NCCG-124C.I

C-Mount
1,1″-CMOS sensor, progressive scan, color
Resolution: 4096 × 3000 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 10 fps
Data interface: M12 / 8 pol X-coded
Processs interface: M12 / 12 pol A-coded
Electrical data:
• extern: U: 12 … 24 VDC, P: 2,6 W @ 12 VDC
• PoE: U: 36 … 57 V DC, P: 3,2 W @ 48 VDC
4 digital Inputs
4 digital Outputs (with PWM, max. 48 V / max. 2,5 A)
Dimensions: 40 mm x 40 mm x 51 mm
Protection: IP 65/67 (with mounted tube and cable)

Item No.	Description

NCCG-13M

GigE Area Scan Camera NCCG-13M

C-Mount
1/2″ CMOS sensor, progressive scan, monochrome
Resolution: 1280 × 1024 pixels
Pixel size: 4.8 µm x 4.8 µm
Frame rate: max. 94 fps
GigE output: standard RJ45 female connector
Electrical data:
• external: U: 24 V DC, I: 108 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 87 mA, P: 4.2 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-13C

GigE Area Scan Camera NCCG-13C

C-Mount
1/2″ CMOS sensor, progressive scan, color
Resolution: 1280 × 1024 pixels
Pixel size: 4.8 µm x 4.8 µm
Frame rate: max. 94 fps
GigE output: standard RJ45 female connector
Electrical data:
• external: U: 24 V DC, I: 108 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 87 mA, P: 4.2 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-23M

GigE Area Scan Camera NCCG-23M

C-Mount
1/1.2″ CMOS sensor, progressive scan, monochrome
Resolution: 1920 x 1200 pixels
Pixel size: 5,86 µm x 5,86 µm
Frame rate: max. 51 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 97 mA, P: 2,3 W
• PoE: U: 48 V DC, I: 58 mA, P: 2,8 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-23C

GigE Area Scan Camera NCCG-23C

C-Mount
1/1.2″ CMOS sensor, progressive scan, color
Resolution: 1920 x 1200 pixels
Pixel size: 5,86 µm x 5,86 µm
Frame rate: max. 51 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 97 mA, P: 2,3 W
• PoE: U: 48 V DC, I: 58 mA, P: 2,8 W
Dimensions: 29 mm x 29 mm x 56 mm

Item No.	Description

NCCG-32M

GigE Area Scan Camera NCCG-32M

C-Mount
1/1.8″ CMOS sensor, progressive scan, monochrome
Resolution: 2048 x 1536 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 39 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 107 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 64 mA, P: 3,1 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-32C

GigE Area Scan Camera NCCG-32C

C-Mount
1/1.8″ CMOS sensor, progressive scan, color
Resolution: 2048 x 1536 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 39 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 107 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 64 mA, P: 3,1 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-51M

GigE Area Scan Camera NCCG-51M

C-Mount
2/3″ CMOS sensor, progressive scan, monochrome
Resolution: 2448 x 2048 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 23 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 109 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 65 mA, P: 3,1 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-51C

GigE Area Scan Camera NCCG-51C

C-Mount
2/3″ CMOS sensor, progressive scan, color
Resolution: 2448 x 2048 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 23 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 109 mA, P: 2,6 W
• PoE: U: 48 V DC, I: 65 mA, P: 3,1 W
Dimensions: 29 mm x 29 mm x 56 mm

Item No.	Description

NCCG-53M

GigE Area Scan Camera NCCG-53M

C-Mount
1″ CMOS sensor, progressive scan, monochrome
Resolution: 2592 × 2048 pixels
Pixel size: 4.8 µm x 4.8 µm
Frame rate: max. 23 fps
GigE output: standard RJ45 female connector
Electrical data:
• external: U: 24 V DC, I: 282 mA, P: 6.8 W
• PoE: U: 48 V DC, I: 87 mA, P: 4.2 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-53c

GigE Area Scan Camera NCCG-53C

C-Mount
1″ CMOS sensor, progressive scan, color
Resolution: 2592 × 2048 pixels
Pixel size: 4.8 µm x 4.8 µm
Frame rate: max. 23 fps
GigE output: standard RJ45 female connector
Electrical data:
• external: U: 24 V DC, I: 282 mA, P: 6.8 W
• PoE: U: 48 V DC, I: 87 mA, P: 4.2 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-124M

GigE Area Scan Camera NCCG-124M

C-Mount
1.1″ CMOS sensor, progressive scan, monochrome
Resolution: 4096 × 3000 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 10 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 120 mA, P: 2,9 W
• PoE: U: 48 V DC, I: 73 mA, P: 3,5 W
Dimensions: 29 mm x 29 mm x 56 mm

NCCG-124C

GigE Area Scan Camera NCCG-124C

C-Mount
1.1″ CMOS sensor, progressive scan, color
Resolution: 4096 × 3000 pixels
Pixel size: 3,45 µm x 3,45 µm
Frame rate: max. 10 fps
GigE output: standard RJ45 female connector
Electrical data:
• extern: U: 24 V DC, I: 120 mA, P: 2,9 W
• PoE: U: 48 V DC, I: 73 mA, P: 3,5 W
Dimensions: 29 mm x 29 mm x 56 mm

Item No.	Description

NCLG-120M

GigE Area Scan Camera NCLG-120M

M58-Mount (C-, F-, M42-Mount via adapter)
APS-C CMOS sensor, progressive scan, monochrome
Resolution: 4096 x 3072 pixels
Pixel size: 5.5 µm x 5.5 µm
Frame rate: max. 19 fps
GigE output: 2x standard RJ45 female connector
Dual Gigabit Ethernet (Static Link Aggregation)
Electrical data:
• external: U: 24 V DC, I: 255 mA, P: 6.1 W
• PoE: U: 48 V DC, I: 154 mA, P: 7.4 W
Dimensions: 60 mm x 60 mm x 52,4 mm

NCLG-120C

GigE Area Scan Camera NCLG-120C

M58-Mount (C-, F-, M42-Mount via adapter)
APS-C CMOS sensor, progressive scan, color
Resolution: 4096 x 3072 pixels
Pixel size: 5.5 µm x 5.5 µm
Frame rate: max. 19 fps
GigE output: 2x standard RJ45 female connector
Dual Gigabit Ethernet (Static Link Aggregation)
Electrical data:
• external: U: 24 V DC, I: 255 mA, P: 6.1 W
• PoE: U: 48 V DC, I: 154 mA, P: 7.4 W
Dimensions: 60 mm x 60 mm x 52,4 mm

NCLG-200M

GigE Area Scan Camera NCLG-200M

M58-Mount (C-, F-, M42-Mount via adapter)
35 mm CMOS sensor, progressive scan, monochrome
Resolution: 5120 x 3840 pixels
Pixel size: 6.4 µm x 6.4 µm
Frame rate: max. 12 fps
GigE output: 2x standard RJ45 female connector
Dual Gigabit Ethernet (Static Link Aggregation)
Electrical data:
• external: U: 24 V DC, I: 247 mA, P: 5.9 W
• PoE: U: 48 V DC, I: 150 mA, P: 7.2 W
Dimensions: 60 mm x 60 mm x 52,4 mm

NCLG-200C

GigE Area Scan Camera NCLG-200C

M58-Mount (C-, F-, M42-Mount via adapter)
35 mm CMOS sensor, progressive scan, color
Resolution: 5120 x 3840 pixels
Pixel size: 6.4 µm x 6.4 µm
Frame rate: max. 12 fps
GigE output: 2x standard RJ45 female connector
Dual Gigabit Ethernet (Static Link Aggregation)
Electrical data:
• external: U: 24 V DC, I: 247 mA, P: 5.9 W
• PoE: U: 48 V DC, I: 150 mA, P: 7.2 W
Dimensions: 60 mm x 60 mm x 52,4 mm

Line-Scan Cameras

DAL-S2-2k40

Monochrome line-scan camera Spyder2 CameraLink

M42x1 mount
2048 pixel CCD sensor
14µm x 14µm pixel area
18 kHz line scan rate
Pixel Clock 1 x 40 MHz
Digital output 8/10 Bit CameraLink Standard Base
Power requirements: 12V DC / 5 W
Dimensions: 50 x 85 x 50mm³ (excl. lens adapter)
F-mount adapter is contained in the scope of supply

DAL-LIN-2k80

Monochrome line-scan camera LINEA CameraLink

mount M42x1 (optional C-mount adapter)
CMOS-Sensor 2048 pixel
7,04µm x 7,04µm Pixel size
Sensor size 14,4 mm
line scan rate 80 kHz
Pixel Clock 77 MHz
Power requirements: 12 bis 24 VDC, 4 W
Connector:2xSDR26, 6-Pol Hirose (Mini-CL)
Digital output 8 or 12 Bit via CameraLink Standard
Dimensions 62 x 62 x 31 (B x H x T in mm)

DAL-P4-2k10D

Monochrome line-scan camera Piranha4 CameraLink

M42x1 mount
2048 pixel CMOS sensor
10,56µm x 10,56µm pixel area
100 kHz line scan rate
Pixel Clock 2 x 85 MHz
Digital output 8, 10 or 12 Bit
Base, Medium, Full CameraLink configuration possible
Power requirements: 12 - 24 VDC, 8,3 W
Dimensions: 62 x 62 x 48mm³

Light Sources

CC-FL027x027/W-V02

Area light LED 27 x 27 mm

Lighted area: 27 x 27 mm²
Light source: LED white (6600 K)
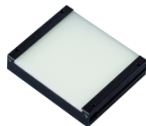**Power requirements: 24 VDC / 2,9 W**
Dimension: 29 x 39 x 15 mm³

CC-FL043x035/W-V02

Area light LED 43 x 35 mm

Lighted area: 43 x 35 mm²
Light source: LED white (6600 K)
Power requirements: 24 VDC / 4,8 W
Dimension: 45 x 47 x 15 mm³

CC-FL051x051/W-V02

Area light LED 51 x 51 mm

Lighted area: 51 x 51 mm²
Light source: LED white (6600 K)
Power requirements: 24 VDC / 8,2 W
Dimension: 53 x 63 x 15 mm³

PLA-0021-M8

Area light LED 100 x 100 mm

Lighted area: 100 x 100 mm²
Light source: LED white
Power requirements: 24 VDC
Dimension: 140mm x 135mm x 20mm

PLA-0030/W

Area light LED 300 x 200 mm

Lighted area: 300 x 200 mm²
Light source: LED white
Power requirements: 24 VDC / 19,2 W
Dimension: 250mm x 340mm x 20mmDC

CC-BL041x016/W-V02

High-Power LED-Light

Lighted area: 41 x 16 mm²
Light source: LED white
Power requirements: 24 VDC / 3,8 W
Dimension: 53 x 20 x 20 mm³

Item No.	Description
CC-BL080x016/W-V02	**High-Power LED-Light**
	Lighted area: 80 x 16 mm² **Light source: LED white** **Power requirements: 24 VDC / 7,6 W** **Dimension: 92 x 20 x 20 mm³**
CC-BL074x030/W-V02	**High-Power LED-Light**
	Lighted area: 74 x 30 mm² **Light source: LED white** **Power requirements: 24 VDC / 12 W** **Dimension: 86 x 34 x 20 mm³**
TIS-0011/R-24V	**Diffuse ring light LED D 130**
	External dimensions: 125 mm **Light color: red** **Depth: 12mm** **24 VDC**
TIS-0012/R-24V	**Diffuse ring light LED D 100**
	External dimensions: 102 mm **Light color: red** **Depth: 12mm** **24 VDC**
TIS-0021/R-24V	**Ring light LED D 50**
	External dimensions: 50 mm **Light color: red** **Depth: 16mm** **24 VDC**
TIS-0022/R-24V	**Ring light LED D 70**
	External dimensions: 70 mm **Light color: red** **Depth: 22mm** ** 24 VDC**

Gigabit-Ethernet Boards

NET-0010 **GigE-board with 1 Port for PCI-Express x1**

NET-0002 **GigE-board with 2 Ports for PCI-Express x4**

NET-0004 **GigE-board with 4 Ports for PCI-Express x4**

NET-0022/V02 **GigE-Board with 2 Ports for PCI-Express x4
with PoE (Power over Ethernet)**

NET-0024/V02 **GigE-Board with 4 Ports for PCI-Express x4
with PoE (Power over Ethernet)**

Lenses

RIC-OBJ-9M1220   **12 Megapixel lens 12 mm lockable**
C mount , 1,1" , f = 12 mm , F 2,0

RIC-OBJ-9M1618   **12 Megapixel lens 16 mm lockable**
C mount , 1,1" , f = 16 mm , F 1,8

RIC-OBJ-9M2518   **12 Megapixel lens 25 mm lockable**
C mount , 1,1" , f = 25 mm , F 1,8

RIC-OBJ-9M3518   **12 Megapixel lens 35 mm lockable**
C mount , 1,1" , f = 35 mm , F 1,8

RIC-OBJ-9M5024   **12 Megapixel lens 50 mm lockable**
C mount , 1,1" , f = 50 mm , F 2,4

RIC-OBJ-9M7528   **12 Megapixel lens 75 mm lockable**
C mount , 1,1" , f = 75 mm , F 2,8

Item No.	Description
FUJ-0001/V02	**Compact lens 6 mm lockable** **C mount , 1/2" , f = 6 mm , F 1,2**
FUJ-0002/V02	**Compact lens 9 mm lockable** **C mount , 2/3" , f = 9 mm , F 1,4**
FUJ-0003/V02	**Compact lens 12,5 mm lockable** **C mount , 2/3" , f = 12,5 mm , F 1,4**
FUJ-0004/V02	**Compact lens 16 mm lockable** **C mount , 2/3" , f = 16 mm , F 1,4**
FUJ-0005/V02	**Compact lens 25 mm lockable** **C mount , 2/3" , f = 25 mm , F 1,4**
FUJ-0006/V02	**Compact lens 35 mm lockable** **C mount , 2/3" , f = 35 mm , F 1,6**
FUJ-0007/V02	**Compact lens 50 mm lockable** **C mount , 2/3" , f = 50 mm , F 2,3**
FUJ-0008/V02	**Compact lens 75 mm lockable** **C mount , 2/3" , f = 75 mm , F 2,8**

Communication

HIL-0003/2.2

PROFIbus slave board, DS50-DPS-PCI

**PROFIbus DP slave
based on SPC3 ASIC,
max. data rate 12Mbaud, 368 byte process map ,
RS232C diagnostic link**

HIL-0006

**PROFIbus slave board, CIFX 50-DP
PROFIbus DP slave
for PCI**

HIL-0008

PROFIbus slave board, CIFX 50E-DP

**PROFIbus DP slave
for PCI Express**

HIL-0206

Real-Time-Ethernet board, CIFX 50-RE

**PCI Communication Interface netX
for Real-Time-Ethernet - 2x RJ45
for PCI**

Only for NeuroCheck 6.0/6.1!

HIL-0208

Real-Time-Ethernet board, CIFX 50E-RE

**PCI Communication Interface netX
for Real-Time-Ethernet - 2x RJ45
for PCI Express**

Only for NeuroCheck 6.0/6.1!

Item No.	Description

ICP-0001/V02

Digital-I/O board PCI-P16POR16U

PCI-board with 16 digital input channels and 16 digital output channels, opto-decoupled, 2 x 37-pin D-sub connectors on two slot covers. Special feature: with 1 x 37-pin D-sub connector 8 input and 8 outputs channels are available.
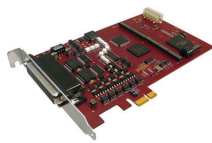
ICP-0002

Digital-I/O board PEX-P16POR16i (PCI-Express)

PCI-Express board with 16 digital input channels and 16 digital output channels, opto-decoupled, 2 x 37-pin D-sub connectors on two slot covers. Special feature: with 1 x 37-pin D-sub connector 8 input and 8 outputs channels are available.

Please note - pin assignment is not compatible with ICP-0001!
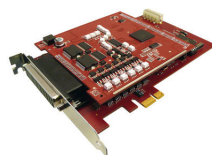
ME-0101

Digital I/O board 16/16 PCI-Express

PCI-Express bus board with 16 digital input channels and 16 digital output channels, opto-decoupled 78-pin D-sub connector.

Only for NeuroCheck 6.0/6.1 usable!

ME-0102

Digital I/O board 32/32 PCI-Express

PCI-Express bus board with 32 digital input channels and 32 digital output channels, opto-decoupled 78-pin D-sub connector.

Only for NeuroCheck 6.0/6.1 usable!

Item No.	Description

Cables

NWK-0005   GigE- Cable Cat.7, Length 5m

NWK-0010   GigE- Cable Cat.7, Length 10m

NWK-0020   GigE- Cable Cat.7, Length 20m

NWK-0105   **GigE- Cable, dragchain resistant**
screw lock on one side
Length 5m

NWK-0110   **GigE- Cable, dragchain resistant**
screw lock on one side
Length 10m

NWK-0120   **GigE- Cable, dragchain resistant**
screw lock on one side
Length 20m

KAB-M12-RJ45_NCG/05   **Gigabit Ethernet cable RJ45 to M12**
for NCG IP-Series
IP67 protected
length 5m

KAB-M12-RJ45_NCG/10   **Gigabit Ethernet cable RJ45 to M12**
for NCG IP-Series
IP67 protected
length 10m

KAB-M12-RJ45_NCG/15   **Gigabit Ethernet cable RJ45 to M12**
for NCG IP-Series
IP67 protected
length 15m

KAB-M12-RJ45_NCG/20   **Gigabit Ethernet cable RJ45 to M12**
for NCG IP-Series
IP67 protected
length 20m

KAB-CL2xMini/05   **CameraLink-Cable**
Mini CL / Mini CL-plug (male)
Length 5m

Item No.	Description
KAB-CL2xMini/10	**CameraLink-Cable** **Mini CL / Mini CL-plug (male)** **Length 10m**
KAB-CLMini/05	**CameraLink-Cable** **MDR26 / Mini CL-plug (male)** **Länge 5m**
KAB-CLMini/10	**CameraLink-Cable** **MDR26 / Mini CL-plug (male)** **Länge 10m**