

core.system COMPONENTS

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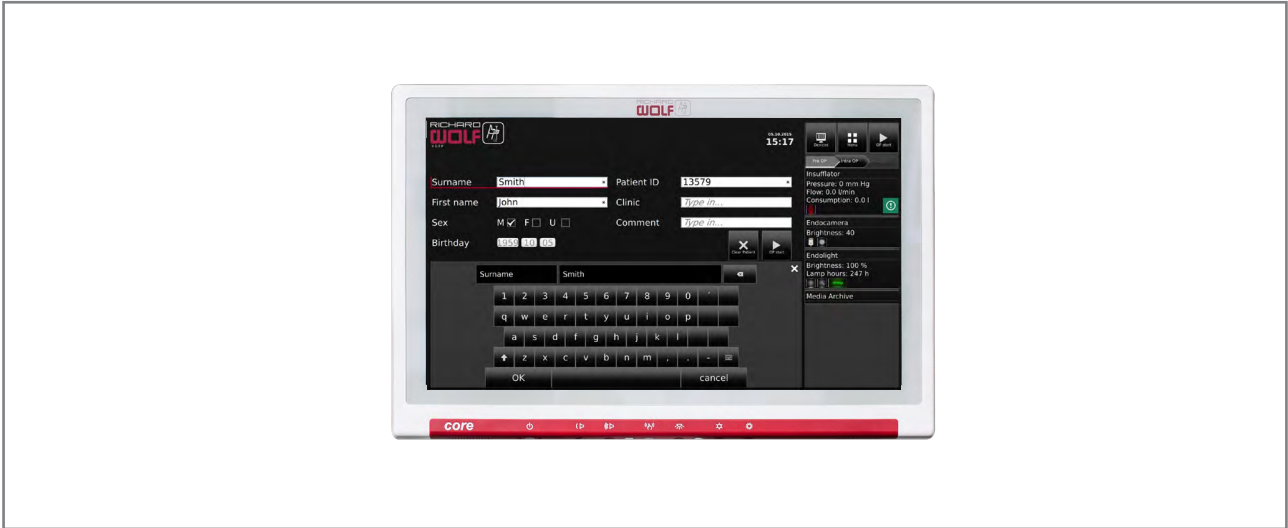
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ACCESSORIES

core.browser CONTROL SOFTWARE



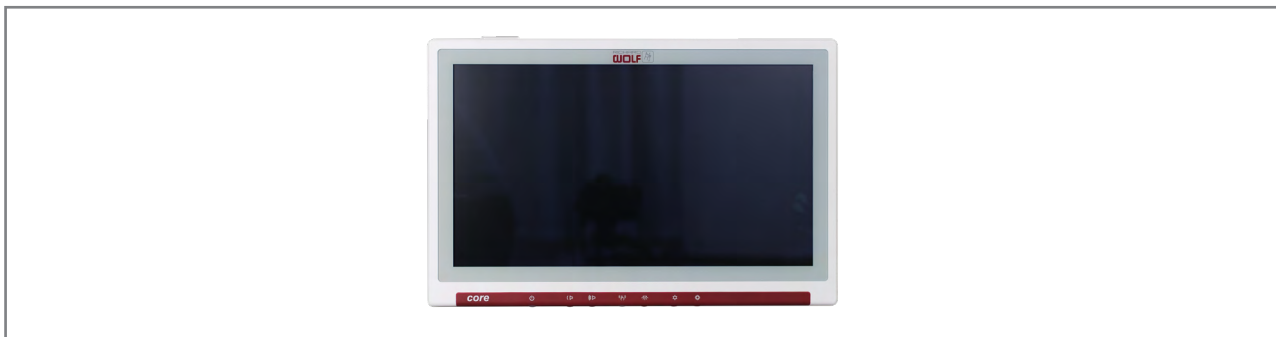
core.browser is the central operating software for the **core** nova system and is always delivered together with a control terminal. It facilitates the display and operation of functions, device control, apps, etc.. A keyboard or a mouse is not necessary for control, since the system is operated entirely using a touchscreen.

- Clear presentation of device functions
- Display of device status
- Display of error and information messages
- Control of third-party devices like OR tables or OR lights
- Various languages available
- Presets für endoskopische Geräte
- Beginning with **core.browser** version 1.6 in stand-alone mode:
 - Receiving patient lists via DICOM WORKLIST
 - Sends images via DICOM STORE
 - Commits DICOM data storage via DICOM STORAGE COMMITMENT
 - Supports the fileshare module

core.browser 5592201

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core.control compact CONTROL TERMINAL



core.control compact can be integrated at the nursing station or mounted directly on a cart. Together with the installed core.browser it operates the core nova system.

- Workstation for controlling the core nova system
- Connection to the intraoperative network via LAN connector
- Computer has touch screen to operate

Computer POC-W2131710-T

Technical data		Computer POC-W2131710-T
Panel characteristics		
Monitor size	21.5 inch (54.5 cm)	
Resolution / Aspect ratio	1920 x 1080 / 16:9	
Max. brightness	250 cd/m ²	
Contrast ratio	1000 : 1 (typ)	
Angle of view	178° H / 178° V	
Equipment		
Touchscreen	Analog resistive	
IP protection	Front side IP65, rear side IPX1	
Equipotential bonding	ZPA	
Enclosure mount	VESA 75/100	
Power supply		
Input voltage	90 - 260 Vac, 47-63 Hz, 1.35 - 0.5 A	
Output voltage	AC/DC adapter / +18 VDC, max. 5.55 A	
Power consumption	100 W	
Regulatory Compliance		
Certifications	UL60601-1/EN60601-1 Edition 3.1, CE & FCC Edition 4.0 Class B, and CCC certified	
PC module		
CPU	Intel® Core™ i7-6600U Processor	
RAM	8 GB (only for internal use)	
HDD	128 GB SSD (only for internal use)	
Inputs	2x RJ45 Gigabit Ethernet	
Dimensions and weight		
Weight	6.9 kg	
Dimensions (w x h x d)	550 x 360 x 65 mm	

core.connect THIRD-PARTY DEVICE CONTROL INTERFACE



core.connect is a universal converter interface for controlling thirdparty devices.

This may relate to OR tables, surgical lights (incl. camera) or other devices.

core.connect Interface **5592501**

- Connection of third-party devices via CAN bus, serial or infrared communication possible
- Power supply via Power over Ethernet (PoE) or alternatively via an external power supply unit
- A range of drivers is available

Technical data		core.connect Interface 5592501
Equipment		
IP protection	IP 20	
Operating mode	Continuous operation	
Power supply		
Input voltage	100 - 240 Vac, ± 10 % (50/60 Hz)	
Power supply	AC/DC Adapter (optional) 5 VDC, 2.0 A, 10 W	
Power supply via LAN (Ethernet)	+ 48V DC Power via Ethernet (PoE)	
Max. power consumption	max. 5W	
Power rating	max. 1A	
Regulatory Compliance		
Certifications	IEC 60601-1, Class I Medical Device, UL 60601-1 / CSA c22.2 No. 601.1 - low voltage	
Interfaces		
LAN (Ethernet) network connector	RJ45 (10/100/1000 Mbit/s)	
CAN-BUS	Sub-D socket, 9-pin	
Infrared	Sub-D socket, 9-pin	
Serial	Sub-D plug, 9-pin	
Dimensions and weight		
Weight	0.22 kg	
Dimensions (w x h x d)	150 x 83 x 30 mm	

core.connect

THIRD-PARTY DEVICES INTEGRATING INTERFACE

SALES SETS (HW INCL. SW)

core.connect OR-Table Maquet 5592705

Supported models from Maquet:

Alphamaquet 1150, Alphastar 1132, Alphamaxx 1133, Betastar 1131,
Magnus 1180, Meera 7200, Otesus 1160, Yuno Otn 1433

also:

Power-supply unit 6600435 FW8001M/12

core.connect lighting bndl Trumpf 55926071

Supported models from Trumpf:

iLED 3/5 and TruLight 5000/3000, TruLight 5000C, TruVidia SD/HD

Content:

1x **core.connect** interface 5592501
1x Driver operating lamp Trumpf 5592607
1x Serial data cable 1m ST/BU 9POL SUB-D 72325380

core.connect OR-light KLS Martin bundle 55926111

Supported models from KLS Martin:

marLED V16/V10, marLED E15/E9/E9i,
surgiCam SD/HD (integrated into the lamp)

Content:

1x **core.connect** interface 5592501
1x Driver surgical light KLS Martin 5592611
1x Serial data cable 1m St/Bu 9pol sub-D 72325380

core.connect HF unit bndl KLS Martin 55926061

Supported models from KLS Martin:

Maxium ME402

Content:

1x **core.connect** interface 5592501
1x Driver surgical light KLS Martin 5592606
1x RS-232 connection cable 5052912

core.connect

THIRD-PARTY DEVICES CONTROL INTERFACE

SALES SETS (HW INCL. SW)

core.connect HF unit bndl ERBE 55926141

Supported models from Erbe: VIO300D

Content:

1x **core.connect** interface 5592501
1x Driver HF unit Erbe 5592614
1x Connection cable ECB 1m 643211489

core.connect OR-Table opt bndl 55927011

Supported models from OPT: ASSO and VANTO.

Driver for OR Tables from OPT is already installed on the **core.connect** interface.

Content:

1x **core.connect** OR Table opt 5592701
1x Emergency stop-cable serial - A 643211560
1x Emergency stop-cable serial - B 643211561
1x Emergency Stop Module 5590.830

core.connect
ACCESSORIES FOR OR TABLES



Emergency Stop Module **5590.830**
Emergency Stop Module for interrupting the communication connection between **core.connect** and the third party device.

Device dimensions (w x h x d): 80 x 90 x 73 mm
Weight: approx. 0.15 kg

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core.portal VIRTUELLER SERVER

core.portal is the server-based central unit of the core nova system. It establishes the connection between the OR network and the hospital-wide IT systems.

core.portal is a server application, which is installed as a preconfigured image in a virtual environment.

- Provides various services centrally in all operating rooms
- Receiving and forwarding of patient lists via DICOM WORKLIST
- Receiving and forwarding of images and videos via DICOM STORE
- Beginning with core.portal version 4.7.14 DICOM STORAGE COMMITMENT: Commits DICOM data storage
- HL7 compatible
- Management of recorded images and videos via Media Archive App
- Allows streaming by using the conference room app

Requirements:

- A server providing a virtual environment with the ESXi operating system is required for the installation
- The server hardware is not included in the Richard Wolf offer, it has to be provided by the customer
- Hardware requirements for the server are available on request

core.portal **5597101**

Basic software (license valid for max. 25 OR rooms)

core.portal OP connector **5597151**

Establishes a connection between a specific OR and the core.portal. One connector is required for each OR.

core.portal

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core.portal SOFTWARE APPLICATIONS

core.portal APPLICATIONS

Workflow

Checklist app 5597706

The surgical safety checklist aims on the one hand to decrease errors and adverse events and on the other to enhance teamwork and communication during an operation.

- WHO Checklist is assigned as standard
- Customer specific checklists can be generated by RW Service during app installation
- The app generates a PDF report, which is stored in the media archive

Requirements:

- core.portal is required

Communication

Conference room app 5597703

Transmits media streams (Audio & Video) from an OR room to max. 5 receivers in the hospital network.

Requirements:

- core.portal is required
- core.consult must be installed at each receiver PC
- The app is required for each OR room which needs to use the streaming function

core.consult 5593201

Desktop communication software for connecting to an OR theater.

- core.consult is a windows PC application
- Allows bidirectional audio communication between core.media and core.consult
- Allows unidirectional image transmission

Requirements:

- core.portal is required
- Conference room app is required
- core.consult must be installed on each receiver PC

Output modules

Media archive fileshare 5597203

It allows the storage of intraoperative data to an enabled directory in the hospital's IT infrastructure. The module is required for each fileshare folder.

Requirements:

- Beginning with core.browser version 1.6 core.portal is not necessarily required

Media archiv ELO 5597206

It connects to the ELO (electronic Leitz folder) office software for the transmission of recorded images.

The module must be licensed for each operating room, from which data are to be transmitted to ELO.

Requirements:

- core.portal is required

Input module

core.portal Scheduling HL7 5597303

It is used for transmitting demographic patient data or surgery scheduling data from a hospital information system via HL7 messages to core.portal. One module is required for each message type.

Requirements:

- core.portal is required

core.portal AUDIO INTEGRATION

Standard Audio Integration supports audio communication and playing music

Audio bndl loudspeaker 55932011

Content:

- 1x 2-way in-ceiling speakers EXCITE IC5
- 1x Speaker cable, 50 m 415-0051F
- 1x External power supply AFM60US24
- 1x Power cable 2440.03

Cable bndl audio small 55931031

Content:

- 1x USB adapter A/DC hollow connector 70265
- 1x Adapter cable CEHS-MB 01
(for DW10 Headset, 3.5 mm jack plug) 506033
- 1x Adapter for PC headset 35508
- 1x Y adapter audio cable PC1Z-0010-SW
- 2x Cable, mini jack to mini jack, 0,5m GOCU-0050-SW
- 1x Mini jack to RCA cable 10m ON2A-1000-SW
- 1x Cable minijack/minijack (10m) GOCU-1000-SW

core.connect audio bndl amplifier 55926161

Supported models: Mini Digital Amplifier PA2B

Content:

- core.connect interface 5592501
- Driver audio PTN 5592616

Headset DW 10 EU 504300

Headset with base station for audio streaming and telephony.

USB rechargeable.

DECT CAT-iq EU (1,880 to 1,900MHz)

Headset DW 10 UK 504301

Headset with base station for audio streaming and telephony.

USB rechargeable.

DECT CAT-iq EU (1,880 to 1,900MHz)

Headset DW 10 EU 504300

Headset DW 10 UK 504301

For making phone calls using the **core nova** system. The DW Office is a monoaural DECT Headset with different wearing styles. The rechargeable battery is integrated in the ear clip, a separate battery pack is not necessary.

- Enhanced carrying comfort – Selection between an ear clip and headset
- Intuitive handling – microphone mute switch and volume control
- Up to 8 hours talk time in wideband mode
- Up to 12 hours talk time in narrowband mode
- Intelligent fast load – 50 % of battery performance in just 20 minutes gives 4 hours of talk time

Weight: 22 g with ear clip / 50 g with headset



Kopfbügel und Ohrclip auf Ladestation und einzeln

core.portal AUDIO INTEGRATION



2-way in-ceiling speakers EXCITE IC5

The 2-way ceiling-mounting loudspeakers are supplied in a dual set, white finish, option of painting individually.

- Music power rating: 60 watts
- Impedance: 8 ohms

core.portal ROOM CAMERA



Network camera **VB-H45**

IP network camera for installation in OR rooms.

Indoor dome housing **DR41-C-VB**

For indoor ceiling mounting. To be used exclusively in conjunction with network camera VB-H43.

Room camera app **5597702**

Allows intraoperative control of up to 4 compatible IP room cameras installed in the same operating room. Previews are supported.

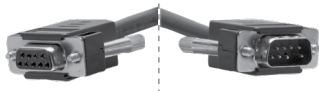


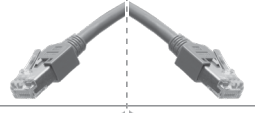

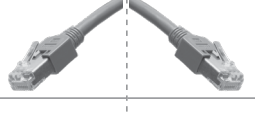
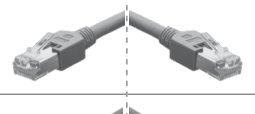
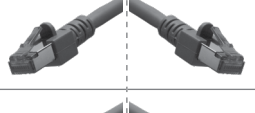
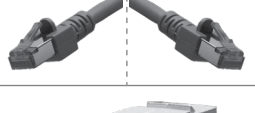
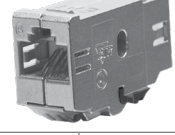
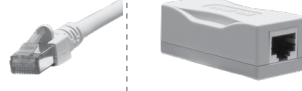


Requirements:

- **core.portal** is required
- This app is required in each operating room where an IP room camera needs to be controlled
- Only network cameras VB-H43 and VB-H45 are supported.
- Network camera must be installed and configured by an authorized system integrator
- Power supply via power over ethernet



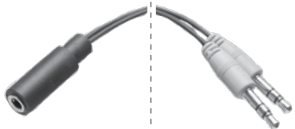


Technical data Network camera VB-H45	
Image sensor	
Type	1/3 inch type CMOS (primary color filter)
Resolution	Approx. 2.1 million pixels
Scan system	Full-image method (progressive)
Telescope	
Zoom range and adjustment	Objective lens with 20-fold optical zoom (20-fold digital) and autofocus
Focal length	4.7 (wide angle) - 94 mm (Tele)
Horizontal image angle	60.4° (wide angle) - 3.2° (Tele)
Vertical image angle	35.1° (wide angle) - 1.8° (Tele)
Power supply	
Power supply	Power over Ethernet
Max. power consumption	9,2 W
Dimension and weight	
Weight	1,2 kg
Dimensions (w x h)	132 x 155 mm

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ACCESSORIES

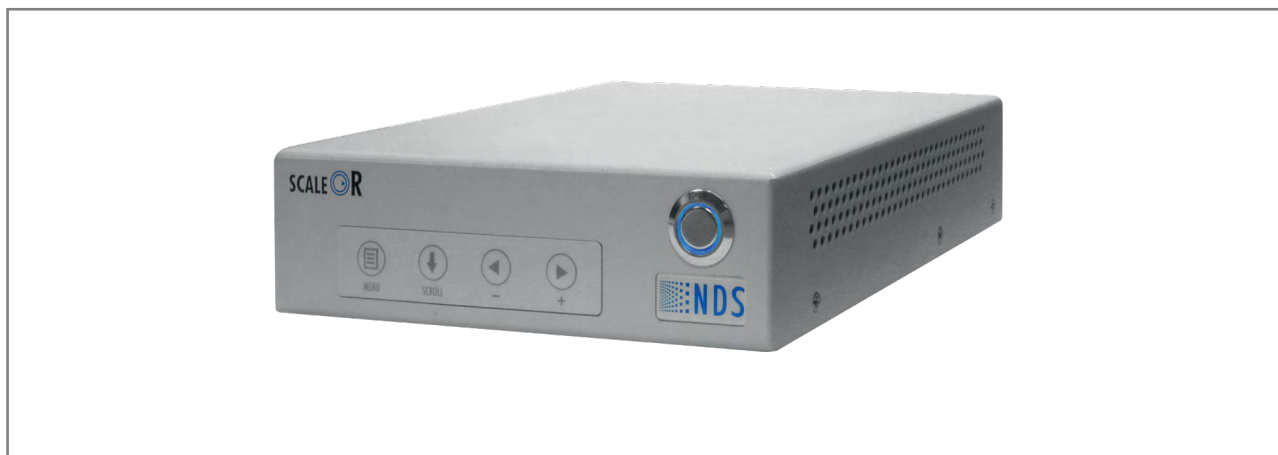
Serial connection cables		Length	Product no.
	Serial data cable 1m, ST/BU 9pol SUB-D	1 m	72325380
	Serial data cable 10m, SUB-D 9pol.ST/BU	10 m	72325.361
	RS 232 connection cable		5052.912
Network connection cables and connectors		Length	Product no.
	Ethernet-cable	2 m	103.03
	Ethernet-cable	5 m	72325.328
	Patch cable, RJ45 SFTP, 0,5m	0,5 m	72325378
	Patch cable, RJ45 HRS TM11 1,0m	1 m	72325429
	Patch cable, RJ45 S/FTP CAT.6 10m	10 m	72325434
	Patch cable, RJ45 S/FTP CAT.6 20m	20 m	72325435
	E-DAT modul coupler 180° CAT.6 Fully shielded 180° coupler made of refined zinc die-casting. 2 mounting versions in a coupler, fits in module or keystone applications.		1309A0-I
	Medical isolator Network isolator for medical devices Data speed: 10/100/1000 Mbit/s Electrical strength, signal and shielding: 5000V		MI 1005
	Crimping pliers for BNC cable assembly, compatible with connector NBNC75BWU13		723231329
	Crimping insert		723231330

ACCESSORIES

Video connection cables and connectors		Length	Product no.
	Vektor plus coax cable 50,00m PUR flexible, non-terminated video patch cable	50 m	600-0211
	Coaxial cable Vektor Plus 1,00m	1 m	DZGR-0100-SW-GN
	Coaxial cable Vektor Plus 2,00m	2 m	DZGR-0200-SW-GN
	Coaxial cable Vektor Plus 3,00m	3 m	DZGR-0300-SW-GN
	Coaxial cable Vektor Plus 15,00m	15 m	DZGR-1500-SW-GN
	Coaxial cable Vektor Plus 25,00m	25 m	DZGR-2500-SW-GN
Flexible, prefabricated video patch cable with BNC video plug connectors.			
	BNC-HDTV rear twist		NBNC75BWU13
	Adapter for PC headset For connecting the headset 504300/504301 to core.media or to a connecting panel. 3.5 mm jack socket (4-pin) to 2x 3.5 mm jack plug	0,6 m	35508
	USB adapter A/DC hollow connector For power supply to headset 504300/504301 for core.media	1,5 m	70265
	Adapter cable CEHS-MB 01 Adapter cable for DW headset with 3.5 mm jack plug	0,7 m	506033
	Y adapter audio cable, jack For connection to core.media if a simultaneous output on the headset and speakers is required	0,1 m	PC1Z-0010-SW
Other		Length	Product no.
	Power cable	3 m	2440.03
	Mini GBIC module Optical transceiver for network switch SFP (Mini GBIC) transceiver module IEEE802.3z, CSMA/CD, TCP/IP Wavelength: 1310nm, Cable: Single mode fiber Maximum length of cable: 10km, Data rate: 1.25Gbps, Port type: LC		TL-SM311LS

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Single Signal Converter



- SCALEOR DVI input without glass fiber** 559109911
- SCALEOR SDI input without glass fiber** 559109922
- SCALEOR VGA input without glass fiber**..... 559109933
- SCALEOR S-Video input without glass fiber** 559109944

SCALE OR

Single signal converter for integration of mobile devices in the **core** nova system

- External devices without SDI output can be connected to **core.media**
- Connected input signals are converted into 3G-SDI

Technical data		559109911 / 559109922 / 559109933 / 559109944
Power supply		
Power supply	Integrated power supply	
Max. power consumption	12 VDC	
Regulatory Compliance		
Certifications	UL60601-1, EN60601-1-2, UL60601-1, CAN/CSA C22.2 No. 60601-1 FCC Part 15, Class I Medical Device	
Interface		
Input video	DVI SDI / HD-SDI / 3G-SDI VGA S-Video	
Output Video	DVI (DVI-D) SDI / HD-SDI / 3G-SDI (BNC)	
Dimensions and weight		
Weight	0,6 kg	
Dimensions (w x h x d)	147,3 x 190,5 x 42,4 mm	

BASIC VIDEO CABLE *core.media*

Basic video cable bndl 55931011

For video and network signals in *core* nova installations

Content:

1x Vektor plus coax cable 50,00m PUR	600-0211
4x Coaxial cable Vektor Plus 15,00m	DZGR-1500-SW-GN
2x Coaxial cable Vektor Plus 25,00m	DZGR-2500-SW-GN
20x BNC-HDTV rear twist	NBNC75BWU13
3x Patch cable, RJ45 S/FTP CAT.6 10m	72325434
1x Patch cable, RJ45 S/FTP CAT.6 20m	72325435

Basic connection plate bndl 55931021

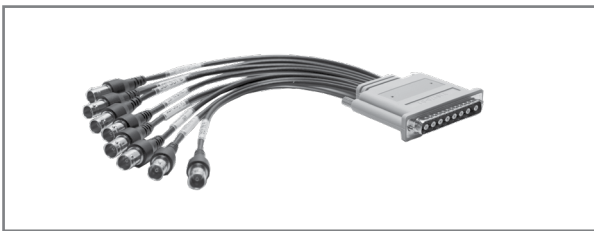
For wiring during a *core* nova installation

Content:

10x Hollow wall switch socket D68X47	74008100
1x Mounting shank for socket drill D68	74008102
1x Doses drill D68	74008101
6x E-DAT modul coupler 180° Cat.6	1309A0-I
7x Concealed frame for connection plate	72326169
7x Frame simple	72326168
3x Connection plate LAN	64127201
4x Connecting plate SDI	64127202
16x BNC HDTV patch panel mounting socket	BNC-FP-HD

Video I/O breakout cable 643211608

Connecting cable *core.media*



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