Imaging and optical data	
Field of view (FOV)	24° × 18°
Minimum focus distance	0.3 m (1.0 ft.)
Focal length	38 mm (1.5 in.)
Spatial resolution (IFOV)	0.65 mrad
Lens identification	Automatic
F-number	1.1
Thermal sensitivity/NETD	<40 mK @ +30°C (+86°F)
Image frequency	30 Hz
Focus	Automatic or manual (electric or on the lens)
Digital zoom	1–2× continuous
Panning	Panning on frozen image
Digital image enhancement	Adaptive digital noise reduction

Detector data	
Detector type	Focal Plane Array (FPA), uncooled microbolometer
Spectral range	7.5–13 µm
IR resolution	640 × 480 pixels

Image presentation	
Display	Built-in widescreen, 5.6 in. LCD, 1024 × 600 pixels
Viewfinder	Built-in, tiltable LCD, 800 × 600 pixels
Automatic image adjustment	Continuous/manual; linear or histogram based
Automatic image adjustment, type	Standard or histogram based from image content
Manual image adjustment	Level/span/max/min

Image presentation modes	
Infrared image	Full IR-image with selected color scale
Visual image	Full color visual image
Thermal fusion	IR image shown above, below or within temp interval on visual image
Picture in Picture	Resizable and movable IR area on visual image
Reference image	Shown together with live IR image

Measurement	
Object temperature range	–40°C to +120°C (–40°F to +248°F) 0°C to +500°C (+32°F to +932°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis	
Spotmeter	3
Area	3 boxes or circles with max./min./average
Automatic hot/cold detection	Max/Min temp. value and position shown within box, circle or on a line
Isotherm	2 with above/below/interval
Difference temperature	Delta temperature between measurement functions or reference temperature
Reference temperature	Manually set or captured from any measurement function
Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from internal sensors

Emissivity correction	Variable from 0.01 to 1.0 or selected from editable materials list
Emissivity table	Emissivity table of predefined and editable materials
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
External optics/windows correction	Automatic, based on inputs of optics/window transmission and temperature

Alarm	
Humidity alarm	1 humidity alarm, including dew point alarm
Insulation alarm	1 insulation alarm

Set-up	
Set-up commands	Configurable measurment tools menu; configure information to be shown in image; 2 Programmable buttons; user profiles; local adaptation of units, language, date and time formats

Storage of images	
Image storage type	Removable memory card
Image storage mode	IR/visual images, simultaneous storage of IR and visual images. Visual image is automatically associated with corresponding IR image.
Periodic image storage	Every 10 seconds up to 24 hours
Panorama	For creating panorama images in FLIR Reporter Building software
File formats	Standard JPEG, 14 bit measurement data included
File formats, visual	Standard JPEG, automatically associated with corresponding thermal image

Image annotations	
Voice	60 seconds stored with the image
Text	Predefined text or free text from PDA (via IrDA) stored with the image
Image description	Free text from PDA using IrDA
Image marker	4 on IR or visual image

Video streaming	
Non-radiometric IR-video streaming	MPEG-4 to PC using USB or WLAN (optional)

Digital camera	
Built-in digital camera	3.2 Mpixel, auto focus, and video lamp
Video lamp	Built-in video lamp

Laser pointer	
Laser	Activated by dedicated button
Laser classification	Class 2
Laser type	Semiconductor AlGaInP diode laser, 1 mW, 635 nm (red)

Data communication interfaces	
USB	• USB-A: Connect external USB device (e.g. memory stick) • USB Mini-B: Data transfer to and from PC / streaming MPEG-4
USB, standard	USB 1.1 Full speed (12 Mbps)
USB, connector type	• USB-A connector • USB Mini-B connector
IrDA	Infrared communications for text comments from PDA
SD Card	Two card slots
Audio	Headset connection for voice annotation of images
Audio, connector type	4-pole 3.5 mm jack

Composite video	
Video	Composite video output
Video, standard	CVBS (ITU-R-BT.470 PAL/SMPTE 170M NTSC)
Video, connector type	Standard RCA connector

Power system	
Battery type	Rechargeable Li Ion battery
Battery voltage	7.2 V
Battery capacity	4.4 Ah
Battery operating time	> 3 hours at 25°C (+68°F) and typical use
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger

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Charging time	2.5 h to 95% capacity, charging status indicated by LED's
External power operation	AC adapter 90–260 VAC, 50/60 Hz or 12 V from a vehicle (cable with standard plug, optional)
Power management	Automatic shutdown and sleep mode (user selectable)
Environmental data	
Operating temperature range	–15°C to +50°C (+5°F to +122°F)
Storage temperature range	–40°C to +70°C (–40°F to +158°F)
Humidity (operating and storage)	IEC 68-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
EMC	• EN 61000-6-2:2005 (Immunity) • EN 61000-6-3:2007 (Emission) • FCC 47 CFR Part 15 Class B (Emission)
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)
Physical data	
Camera weight, excl. lens and battery	1.13 kg (2.49 lb.)
Camera weight, incl. lens and battery	1.8 kg (4.0 lb.)
Battery weight	0.24 kg (0.52 lb.)
Camera size, excl. lens (L × W × H)	282 × 144 × 147 mm (11.1 × 5.7 × 5.8 in.)
Cameras size, incl. lens (L × W × H)	299 × 144 × 147 mm (11.8 × 5.7 × 5.8 in.)
Battery size (L × W × H)	141 × 47 × 28 mm (5.5 × 1.8 × 1.1 in.)
Battery charger size (L × W × H)	158 × 122 × 25 mm (6.2 × 4.8 × 1.0 in.)
Tripod mounting	UNC ¼"-20
Housing material	Magnesium
Grip material	TPE Thermoplastic Elastomer Plastics

Scope of delivery

- Hard transport case
- Infrared camera with lens
- Battery (2 ea., one inserted in camera, one outside camera)
- Battery charger
- Calibration certificate
- FLIR QuickReport™ PC software CD-ROM
- Headset
- Lens cap (mounted on lens)
- Lens cap (2 ea.)
- Mains cable
- Memory card-to-USB adapter
- Memory card with adapter
- Power supply
- Printed Getting Started Guide
- Shoulder strap
- USB cable
- User documentation CD-ROM
- Video cable
- Warranty extension card or Registration card

Optional Accessories

- 1196683 Close-up IR lens 0.5X, f = 75 mm (fits 24° IR lens) for ThermaCAM and FLIR 600 series
- T197188 IR lens f = 76 mm, 12°, incl. case for FLIR 600 series
- T197190 IR lens, f = 131 mm, 7°, incl. case for FLIR 600 series
- T197189 IR lens f = 19 mm, 45°, incl. case for FLIR 600 series
- T197187 IR lens f = 38 mm, 24°, incl. case for FLIR 600 series
- T197341 Macro lens 1x (25 um) with case
- T197343 Protective window (fits 24°) with case
- 1196745 High temperature option +2000°C/+3632°F
- 1196744 High temperature option +1500°C/+2732°F
- 1196209 Battery
- T197563 Battery charger, incl. power supply with multi plugs
- T910814 Power supply, incl. multi plugs
- 1910475 Adapter, SD memory card to USB
- T910737 Memory card micro-SD with adapters
- 1910423 USB cable Std A <-> Mini-B, 2 m/6.6 ft.
- 1910484 Video cable, RCA <-> RCA, 2.0 m/6.6 ft.
- 1910490 Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.
- T197262 Hard transport case for FLIR B/P/SC6XX
- 1910489 Headset, 3.5 mm plug
- T197230 Remote Control Unit

Optional Software

- T197717 FLIR Reporter 8.5 SP1, Professional
- T197717L5 FLIR Reporter 8.5 SP1, Professional, 5 user licenses
- T197717L10 FLIR Reporter 8.5 SP1, Professional, 10 user licenses
- T197778 FLIR BuildIR 2.1
- T197778L5 FLIR BuildIR 2.1, 5 user licenses
- T197778L10 FLIR BuildIR 2.1, 10 user licenses

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Optional Accessories

1196683; Close-up IR lens 0.5X, f = 75 mm (fits 24° IR lens) for ThermaCAM and FLIR 600 series

General description

This close-up optic attaches to the standard 24° lens and provides resolution of very small targets.

Technical data	
Field of view (FOV)	32 × 24 mm (1.26 × 0.94 in.)
Magnifying factor	0.5×
Minimum focus distance	60.3 mm (2.36 in.)
Focal length	76.3 mm (3.0 in.)
Spatial resolution (IFOV)	50 µm
F-number	1.1
Weight	131 g
Size (L × D)	28.6 mm (1.12 in.) × 81.0 (3.19 in)

v1.01

T197188; IR lens f = 76 mm, 12°, incl. case for FLIR 600 series

General description

The 12° lens is a popular lens accessory and provides 2× magnification compared to the standard lens. Ideal for small or distant targets such as overhead power lines.

Technical data	
Field of view (FOV)	12° × 9°
Minimum focus distance	1.2 m (3.9 ft.)
Focal length	76 mm (3.0 in.)
Spatial resolution (IFOV)	0.33 mrad
F-number	1.1
Scope of delivery	
• Lens	
• Lens case	

v1.0

T197190; IR lens, f = 131 mm, 7°, incl. case for FLIR 600 series

General description

The 7° lens is a popular lens accessory and provides 3.5× magnification compared to the standard lens. Ideal for small or distant targets such as overhead power lines.

Technical data	
Field of view (FOV)	7° × 5.3°
Minimum focus distance	3.0 m (9.8 ft.)
Focal length	131 mm (5.2 in.)
Spatial resolution (IFOV)	0.19 mrad
F-number	1.1
Weight	1.50 kg (3.30 lb.), Support 0.45 kg (0.99 lb.)
Size (L × D)	168.2 mm (6.62 in.) × 146.0 mm (5.75 in.)
Scope of delivery	
• Lens	
• Lens case	
• Mounting support	

v1.01

T197189; IR lens f = 19 mm, 45°, incl. case for FLIR 600 series

General description

This wide angle lens has a field of view almost double that of the standard 24° lens. Perfect for wide or tall targets or when working in crowded spaces.

Technical data	
Field of view (FOV)	45° × 34°
Minimum focus distance	0.2 m (0.7 ft.)
Focal length	19 mm (0.75 in.)
Spatial resolution (IFOV)	1.3 mrad
F-number	1.1
Scope of delivery	
• Lens	
• Lens case	

v1.0

T197187; IR lens f = 38 mm, 24°, incl. case for FLIR 600 series

General description

The standard 24° lens is suitable for the majority of applications.

Technical data	
Field of view (FOV)	24° × 18°
Minimum focus distance	0.3 m (1.0 ft.)
Focal length	38 mm (1.5 in.)
Spatial resolution (IFOV)	0.65 mrad
F-number	1.1
Scope of delivery	
• Lens	
• Lens case	

v1.0

T197341; Macro lens 1x (25 um) with case

General description

For R&D usage or development purposes. As an example looking at PCB's or small electronic components.

Technical data	
Field of view (FOV)	16 × 12 mm (0.63 x 0.47 in.)
Magnifying factor	1x
Working distance	18 mm (0.71 in.)
Depth of field	±0.13 mm
Spatial resolution (IFOV)	25 µm
F-number	1.1
Focus	Fixed
Scope of delivery	
• Lens	
• Lens case	

v1.03

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T197343; Protective window (fits 24°) with case

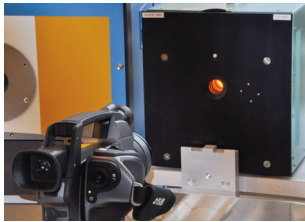| General description	
Protective window for the 24° lens. The window is made of monocrystalline fluoride.	
Scope of delivery	

- Lens
- Lens case

v1.0

1196745; High temperature option +2000°C/+3632°F
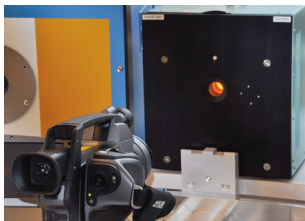

General description	
For high temperature applications the camera can be calibrated for high temperature ranges.	
Technical data	
Optional object temperature range	Up to +2000°C (+3632°F)

v1.0

1196744; High temperature option +1500°C/+2732°F

General description	
For high temperature applications the camera can be calibrated for high temperature ranges.	
Technical data	
Optional object temperature range	Up to +1500°C (+2732°F)

v1.0

1196209; Battery

General description	
High capacity battery for the IR camera.	
Technical data	
Battery type	Rechargeable Li Ion battery
Battery voltage	7.2 V
Battery capacity	4.4 Ah
Battery note	Approximate lithium content: 3.0 g

Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging time	2.5 h to 95% capacity, charging status indicated by LED's
Battery weight	0.24 kg (0.52 lb.)
Size (L × W × H)	141 × 47 × 28 mm (5.5 × 1.8 × 1.1 in.)

v1.01

T197563; Battery charger, incl. power supply with multi plugs

General description	
Stand-alone 2-bay battery charger, including power supply with multi plugs.	
Technical data	
AC operation	100–240 VAC, 50/60 Hz, 12 VDC out
Power	3000 mA at 12 VDC
Battery charger size (L × W × H)	158 × 122 × 25 mm (6.2 × 4.8 × 1.0 in.)
Cable length	1.98 m (6.5 ft.)
Scope of delivery	

- Stand-alone 2-bay battery charger
- Power supply including cable
- EU plug
- UK plug
- US plug
- AU plug

v1.0

T910814; Power supply, incl. multi plugs

General description	
Combined power supply, including multiple plugs, and battery charger to charge the battery when it is inside or outside of the camera.	
Technical data	
AC operation	100–240 VAC, 50/60 Hz, 12 VDC out
Power	3000 mA at 12 VDC
Cable length	1.98 m (6.5 ft.)
Scope of delivery	

- Power supply including cable
- EU plug
- UK plug
- US plug
- AU plug

v1.02

1910475; Adapter, SD memory card to USB

General description	
Adapter, SD memory card to USB.	
Easy to install and use; no additional driver installation required for Windows ME, 2000 and XP. Driver included for Windows 98SE.	
Technical data	
Weight	16 g (0.56 oz.)
Size (L × W × H)	74 × 26 × 11 mm (2.9 × 1.0 × 0.4 in.)

v1.01

T910737; Memory card micro-SD with adapters

General description	
Micro-SD Card for data storage (e.g. images)	
Technical data	
Memory card, size	2 GB
Scope of delivery	

- micro-SD
- Adapter to miniSD Card
- Adapter from miniSD Card to SD memory card

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1910423; USB cable Std A <-> Mini-B, 2 m/6.6 ft.

General description	
This cable is used to connect the infrared camera with a computer, using the USB protocol.	
Technical data	
Weight	60 g (2.1 oz.)
Cable length	1.8 m (5.9 ft.)
Connector	Standard USB-A to USB Mini-B

1910484; Video cable, RCA <-> RCA, 2.0 m/6.6 ft.

General description	
This cable is used to transfer video signals from the infrared camera to an external monitor, or to a computer featuring an internal video card.	
Technical data	
Weight	60 g (2.1 oz.)
Cable length	2.0 m (6.6 ft.)
Connector	RCA to RCA

1910490; Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.

General description	
This cable is used to power the infrared camera from the cigarette lighter socket in a car.	
Technical data	
Cable length	1.2 m (3.9 ft).

T197262; Hard transport case for FLIR B/P/SC6XX

General description	
Hard transport case for FLIR B/P/SC6XX	
Technical data	
Weight	3.5 kg (7.7 lb.)
Size (L × W × H)	495 × 387 × 194 mm (19.5 × 15.2 × 7.6 in.)
Color	Black

1910489; Headset, 3.5 mm plug

General description	
Standard headset with 3.5 mm plug	
Technical data	
Audio	Headset including microphone
Audio, connector type	4-pole 3.5 mm jack
Scope of delivery	
• Headset	

T197230; Remote Control Unit

General description	
Remote Control Unit	

Optional Software

T197717; FLIR Reporter 8.5 SP1, Professional

General description

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-to-interpret maintenance reports.

Professional Report Wizard guides you step-by-step in combining all IR inspection data - infrared and visual images, temperature measurements, and text notes – into a professional, easy-to-interpret maintenance report.

Key features:

- Flexible report page design and layout for customized reports
- Use quick insert function to easily create custom report pages
- Fully integrated with standard Microsoft Word
- Generates reports in standard MS Office format and PDF-format
- Powerful temperature analysis
- Triple Fusion Picture-in-Picture (movable, sizable, scalable)
- Rapid report manager supporting automatic report generation by drag-and-drop
- Trending functionality
- Automatic link to Google™ Maps for images with GPS coordinates
- Automatic summary table for the report
- Fine tune images and make full temperature analysis directly in Microsoft Word
- Spell check
- Create your own formulas including measurement values from images
- Play radiometric sequences directly in the report
- Search functionality to quickly finding images for your report
- Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
- Windows 7, 32 and 64-bit
- Support for MeterLink™ data
- *.docx compatibility

Release notes

Version	8.5 SP1
New features	• Full support for Windows® 7 • Support for MeterLink™ data • *.docx compatibility

Scope of delivery

- FLIR Reporter Professional
- Getting Starting Guide

System requirements

Operating system	Windows XP, 32-bit Windows Vista, 32-bit Windows Vista, 64-bit Windows 7, 32-bit Windows 7, 64-bit

v1.01

T197717L5; FLIR Reporter 8.5 SP1, Professional, 5 user licenses

General description

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-to-interpret maintenance reports.

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- Search functionality to quickly finding images for your report
- Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
- Windows 7, 32 and 64-bit
- Support for MeterLink™ data
- *.docx compatibility

Release notes

Version	8.5 SP1
New features	• Full support for Windows® 7 • Support for MeterLink™ data • *.docx compatibility

Scope of delivery

- FLIR Reporter Professional
- Getting Starting Guide
- 5 user licenses

System requirements

Operating system	Windows XP, 32-bit Windows Vista, 32-bit Windows Vista, 64-bit Windows 7, 32-bit Windows 7, 64-bit

v1.01

T197717L10; FLIR Reporter 8.5 SP1, Professional, 10 user licenses

General description

FLIR Reporter Professional is a powerful software for creating compelling and professional, fully customized, easy-to-interpret maintenance reports.

Professional Report Wizard guides you step-by-step in combining all IR inspection data - infrared and visual images, temperature measurements, and text notes – into a professional, easy-to-interpret maintenance report.

Key features:

- Flexible report page design and layout for customized reports
- Use quick insert function to easily create custom report pages
- Fully integrated with standard Microsoft Word
- Generates reports in standard MS Office format and PDF-format
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- Triple Fusion Picture-in-Picture (movable, sizable, scalable)
- Rapid report manager supporting automatic report generation by drag-and-drop
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- Spell check
- Create your own formulas including measurement values from images
- Play radiometric sequences directly in the report
- Search functionality to quickly finding images for your report
- Panorama tool for combining several images to a larger image
- Support for GF series IR images
- Auto Update function
- Windows 7, 32 and 64-bit
- Support for MeterLink™ data
- *.docx compatibility

Release notes

Version	8.5 SP1
New features	• Full support for Windows® 7 • Support for MeterLink™ data • *.docx compatibility

Scope of delivery

- FLIR Reporter Professional
- Getting Starting Guide
- 10 user licenses

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System requirements	
Operating system	Windows XP, 32-bit Windows Vista, 32-bit Windows Vista, 64-bit Windows 7, 32-bit Windows 7, 64-bit

<div align="right">v1.01</div>

T197778; FLIR BuildIR 2.1

General description

A dedicated and flexible software for advanced analyses of building related applications.
Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies.
Assess scope of damage/problem.
Increase Speed & Quality of your reports.
Quantify geometrical areas and use the panorama tool to stitch images of large objects together.
Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

- See, Quantify and Estimate potential energy cost savings.
- Possibility of assessing scope of damage/problem
- Customized report templates for: Air infiltration, Moisture, Insulation deficiencies, and estimation of potential energy savings.
- Panorama functionality: Create automatically one image from many to cover large objects or increase resolution
- Link files.
- Create graph of the conditions during the inspection.
- Support for MeterLink™ data

Release notes

Version	FLIR BuildIR 2.1
New features	• Support for Windows® 7 • Support for MeterLink™ data • Support for fusion

Scope of delivery

- FLIR BuildIR

System requirements

Operating system	Windows XP, 32-bit Windows Vista, 32-bit/64-bit Windows 7, 32-bit/64-bit

<div align="right">v1.0</div>

T197778L5; FLIR BuildIR 2.1, 5 user licenses

General description

A dedicated and flexible software for advanced analyses of building related applications.
Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies.
Assess scope of damage/problem.
Increase Speed & Quality of your reports.
Quantify geometrical areas and use the panorama tool to stitch images of large objects together.
Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

- See, Quantify and Estimate potential energy cost savings.
- Possibility of assessing scope of damage/problem
- Customized report templates for: Air infiltration, Moisture, Insulation deficiencies, and estimation of potential energy savings.
- Panorama functionality: Create automatically one image from many to cover large objects or increase resolution
- Link files.
- Create graph of the conditions during the inspection.
- Support for MeterLink™ data

Release notes

Version	FLIR BuildIR 2.1
New features	• Support for Windows® 7 • Support for MeterLink™ data • Support for fusion

Scope of delivery

- FLIR BuildIR
- 5 user licenses

System requirements

Operating system	Windows XP, 32-bit Windows Vista, 32-bit/64-bit Windows 7, 32-bit/64-bit

<div align="right">v1.0</div>

T197778L10; FLIR BuildIR 2.1, 10 user licenses

General description

A dedicated and flexible software for advanced analyses of building related applications.
Report templates for energy loss / cost savings potential, air infiltration, moisture and insulation deficiencies.
Assess scope of damage/problem.
Increase Speed & Quality of your reports.
Quantify geometrical areas and use the panorama tool to stitch images of large objects together.
Makes the work considerably easier for building related analyses - Organize, Analyze, Report

Key features:

- See, Quantify and Estimate potential energy cost savings.
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- Customized report templates for: Air infiltration, Moisture, Insulation deficiencies, and estimation of potential energy savings.
- Panorama functionality: Create automatically one image from many to cover large objects or increase resolution
- Link files.
- Create graph of the conditions during the inspection.
- Support for MeterLink™ data

Release notes

Version	FLIR BuildIR 2.1
New features	• Support for Windows® 7 • Support for MeterLink™ data • Support for fusion

Scope of delivery

- FLIR BuildIR
- 10 user licenses

System requirements

Operating system	Windows XP, 32-bit Windows Vista, 32-bit/64-bit Windows 7, 32-bit/64-bit

<div align="right">v1.0</div>

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