icron

High performance USB- and video extension solutions

Icron is the global leader in USB 1.1, USB 2.0, USB 3.0 and HD video extension solutions. Icron's patented ExtremeUSB® technology extends the range of USB over multiple types of media such as Cat X, fiber, LAN, wireless, coax, and powerline.

Applications
Even in the most harsh environments. Demanding users trust Icron extension products for applications like pro audio visual, industrial automation, education, medical diagnostics and imaging, remote desktop extension, security, surveillance, and military systems.moet worden geplaatst.

Extreme USB offers several advantages for USB-compatible devices: easy to use, reliable and consistent connection.

Also convinced?
Siemens, IHSE, Gefen and Philips have chosen for the USB extension technology from Icron! These high-end brands have integrated Icrons ExtremeUSB® technology into their own products. And that's not for nothing: the ExtremeUSB® technology extends USB, PC and video devices over many media types including CATX, fiberglass and LAN. ExtremeUSB® is Plug & Play and compatible with USB devices (1.1, 2.0 and 3.0) from thousands of manufacturers and major operating systems. It is completely transparent and directly connected to a PC. Even in the most demanding environments, including professional audiovisual and industrial applications ExtremeUSB® remains particularly reliable.

Features:
• Transparent USB extension
• True plug and play (no software drivers required)
• Works with all major operating systems such as
  Windows®, Mac OS X® en Linux®

EXTREME USB®
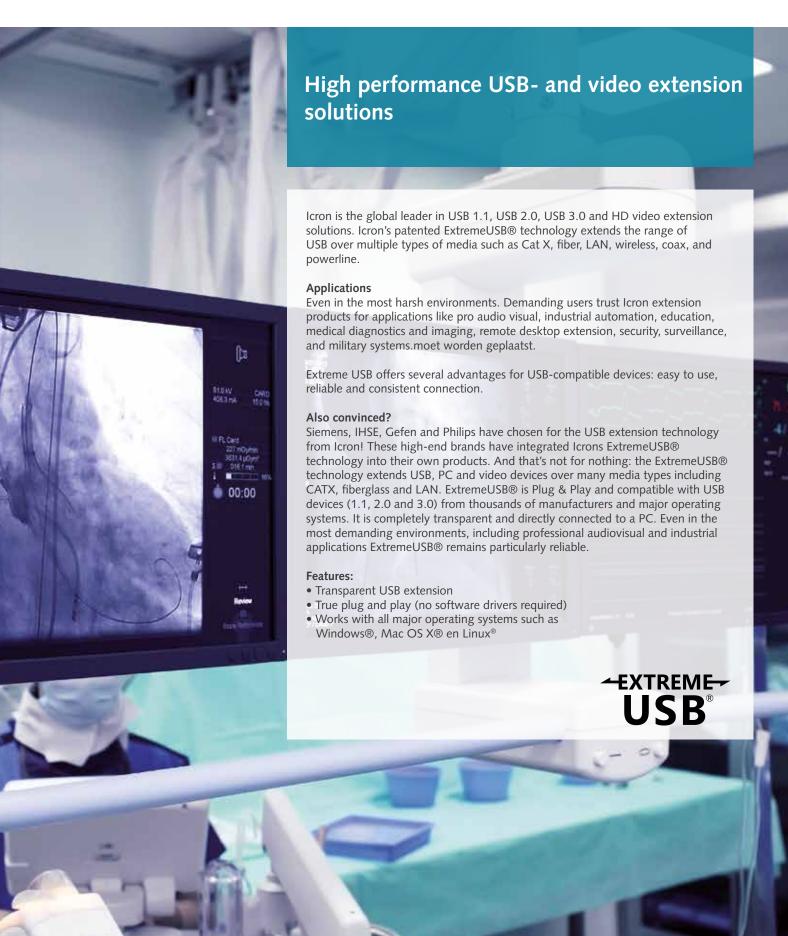
Icron

Icron product overview

Icron Technologies is the world's leading developer and manufacturer of high performance USB and video extension solutions for commercial, medical and industrial markets.
Below is an overview of our ICRON USB 1.1, 2.0, 3.0 extenders. The USB 2.0 Ranger extender set can extend USB 2.0 signal over a distance of 10 km via singlemode fiber.

ExtremeUSB enables long distance extension and has a number of advantages: easy to use, reliable and consistent connection for all USB compatible devices.

Features:
• Transparent USB extension
• Plug and play; no software drivers required
• Works with all common operating systems: Windows®, Mac OS X® and Linux®

Type no.	SD2006	SD2007	SD2029	SD2030	SD2028	SD2031	SD2027
Product	USB 1.1 Rover® 1850	USB 1.1 Rover® 2850	USB 2.0 Ranger® 2301	USB 2.0 Ranger® 2301 GE-LAN	USB 2.0 Ranger® 2311	USB 2.0 Ranger® 2312	USB 2.0 Ranger® 2324
USB version	USB 1.1	USB 1.1	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Max. distance	85m	85m	100m	100m	100m	100m	500m
Data transfer	CAT 5e/6/7	CAT 5e/6/7	CAT 5e/6/7	CAT 5e/6/7 or Local Area Network	CAT 5e/6/7	CAT 5e/6/7	Multimode Fiber
Power supply	Bus Powered	Bus Powered	Receiver	Receiver	Transmitter or Receiver	Transmitter or Receiver	Receiver
Number of USB ports	1	2	1	1	1	2	4

Type no.	SD2032	SD2019	SD2023	SD2021	SD2017	SD2036	SD2035
Product	USB 2.0 Ranger® 2344	USB 2.0 Ranger® 2304	USB 2.0 Ranger® 2304GE-LAN	USB 3.0 Spec-tra™ 3001-15	USB 3.0 Spec-tra™ 3022	Icron USB 3-2-1 Raven™ 3124	Icron USB 3-2-1 Raven™ 3104
USB version	USB 2.0	USB 2.0	USB 2.0	USB 3.0	USB 3.0	USB 3.1, 2.0, 1.1	USB 3.1, 2.0, 1.1
Max. distance	10km	100m	100m	15m	100m	200m	100m
Data transfer	Singlemode Fiber	CAT 5e/6/7	CAT 5e/6/7 or Local Area Network	Active Copper Cable	Multimode Fiber	Multimode Fiber	CAT 6a/7
Power supply	Receiver	Receiver	Receiver	Bus Powered	Receiver	Transmitter and Receiver	Transmitter and Receiver
Number of USB ports	4	4	4	1	2	4	4

USB

Over CATx

Icron

Spectra 3001-15 USB 3.0 extension cable

- Bus powered, no external power supply needed
- Locking USB connector
- USB3 Vision compliant
- Not backwards compatible with USB 2.0 and 1.1

Technical specifications

Connections (in)   : USB A male (x1)
Connections (out)   : USB A female (x1)
Extension cable   : USB 3.0
Extension connector   : USB A female
Extension protocol   : Own
Loop-through   : Yes
Power supply   : Bus powered
Included   : Cable tie

Type no.	Manufacturer no.	Description
SD2021	00-00351	USB 3.0 extension cable 15 meters

USB 2.0 Ranger 2304 extender set

- Operates with all USB controllers
- Fastest through-outputs with read/write devices

Technical specifications

Connections   : RJ45, USB
Connections (in)   : RJ45 female (x1), USB B female (x1)
Connections (out)   : RJ45 female (x1), USB A female (x4)
Extension cable   : CATx (x1)
Extension connector   : RJ45
Extension protocol   : Own
USB version   : USB 2.0 - HighSpeed (Enhanced)
Power supply   : External power supply
Included   : USB 2.0 cable, power adapter

Type no.	Manufacturer no.	Description
SD2019	00-00348	USB Ranger 2304 USB 2.0 extender set

ACT

USB Extender set over UTP

- Active USB extender for an optimal signal
- Equipped with a DC jack for connecting an optional power supply

Technical specifications

Connections (in)   : RJ45, USB Type-A male
Connections (out)   : RJ45, USB Type-A female
Extension cable   : CATx (x1)
Extension connector   : RJ45
Extension protocol   : Own
4K compatible   : Yes
Loop-through   : Yes
Power supply   : Bus powered

Type no.	Manufacturer no.	Description
AC6060	AC6060	USB extender up to 60 meters via UTP RJ45

Over fiber

Icron

Spectra 3022 USB 3.0 extender set

- USB 3.0 extension over up to 100 meters, 50 meters for data storage.
- USB3 Vision compliant
- Rugged locking USB and power connectors
- Not compatible with USB 2.0 and 1.1

Technical specifications

Fiber connection	: Duplex LC
Connections (in)	: USB B female (x1)
Connections (out)	: USB A female (x2)
Extension cable	: Fiber multi mode (x1)
Extension connector	: LC
Extension protocol	: Own
Loop-through	: Yes
Power supply	: Bus powered, External power supply
Included	: SFP transceiver modules, power adapter, USB 3.0 cable, power cable

Type no.	Manufacturer no.	Description
SD2017	00-00328	Spectra 3022 USB 3.0 extender set

Opticis

USB 1.1 fiber extension set

This USB extender extends USB signals up to 40 metres and is specifically suited for critical industrial applications where galvanic separation is required. Thanks to the use of duplex multimode fiber, the OP25-series are unsensitive to electromagnetic or other types of interference. No installation software is needed. These series are bus powered.

Technical specifications

Connections (in)	: USB A male (x1)
Connections (out)	: USB A female (x1)
Extension cable	: Fiber multi mode (x2)
Extension connector	: LC
Extension protocol	: Own
4K compatible	: Yes
Loop-through	: Yes
Power supply	: Bus powered
Included	: Power adapter

Type no.	Manufacturer no.	Description
OP2501	M2-100-10	USB 1.1 fiber extension set
OP2502	M2-100-20	USB 1.1 fiber extension set
OP2503	M2-100-30	USB 1.1 fiber extension set
OP2504	M2-100-40	USB 1.1 fiber extension set

Over IP

Icron

USB 2.0 Ranger 2304 extender set

• Functions with 100Mbps or 1000Mbps LANs

Technical specifications

System cable	:	CAT UTP
Max. length system cable	:	100 m
USB compatibility	:	USB 2.0 - HighSpeed (Enhanced)
Connections (in)	:	USB B female (x1)
Connections (out)	:	USB A female (x4)
Extension connector	:	RJ45
Extension protocol	:	Own
4K compatible	:	Yes
Loop-through	:	Yes
Power supply	:	External power adapter
Included	:	Power adapter

Type no.	Manufacturer no.	Description
SD2023	00-00377	USB Ranger LAN GE-2304 USB 2.0 extender set

Adder

ADDER C-USB LAN extender set

Extends an USB 2.0 signal via an UTP cable. Can be used point-to-point or in combination with the AIM manager (AD8059). Expendable to a KVM matrix of unlimited size.

• Transparant USB functionality
• Plug & play
• Optional available: Transmitter (AD2032) and receiver (AD2033)

Technical specifications

Connections (computer)	:	RJ45 female (x1), USB B female (x1)
Connections (console)	:	RJ45 female (x1), USB A female (x4)
Extension cable	:	CATx (x1)
Extension connector	:	RJ45
Extension protocol	:	Own
4K compatible	:	Yes
Loop-through	:	Yes
Power supply	:	External power supply
Included	:	Power adapter, USB cable

Type no.	Manufacturer no.	Description
AD2031	C-USB-LAN-P-IEC	ADDER C-USB Lan extender set to 100 meters

Over USB

ACT

USB 2.0 Signal Booster

• Possibility to cascade up to 4 USB signal extenders

Technical specifications

Interface	:	USB 2.0
Connector A	:	USB A male
Connector B	:	USB A female

Type no.	Manufacturer no.	Description
AC6005	AC6005	USB 2.0 Booster, 5m
AC6010	AC6010	USB 2.0 Booster, 10m