icron

OEM Products

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EXTREME USB®

USB 2.0 RG2301 Series Turnkey
1-port USB 2.0 Extender PCBA – 100m CAT 5e/6/7 or LAN

Sold as Turnkey PCBAs

The USB 2.0 RG2301 Series offers the ExtremeUSB suite of features from Icron Technologies in a ready to go turnkey form factor; just add an enclosure. It is available as a point-to-point or LAN based extender system and features full device and host support, including newer USB 3.0 compatible devices and controllers.
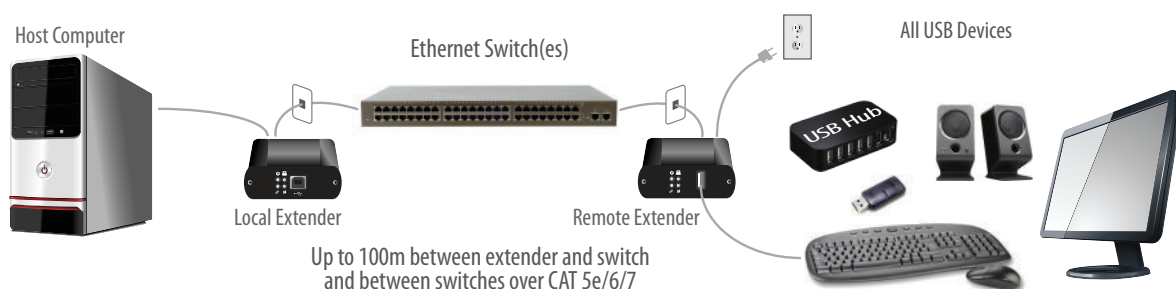

Local Extender PCBA

Remote Extender PCBA

FEATURES	RG2301	RG2301N	RG2301GE-LAN	RG2301S
USB 2.0 throughput up to 480 Mbps	✓	✓	✓	✓
One USB 2.0 port available, use hubs to add up to 30 devices	✓	✓	✓	✓
Up to 1A of current to Remote USB 2.0 port	✓	✓	✓	✓
Mass Storage Acceleration of USB 2.0 device bulk transfers	✓	✓	✓	✓
Quick install, no software drivers required	✓	✓	✓	✓
Windows®, macOS™ and Linux® compatible	✓	✓	✓	✓
100m of extension over CAT 5e/6/7	✓	✓	✓	✓
Extension over LAN network		✓	✓	✓
Device Class Filtering ▸ block mass storage and other USB devices			✓	✓
SwitchableUSB™ ▸ dynamically switch Local and Remote Extender			✓	✓
Simultaneous Users Interaction ▸ simultaneously connect up to 7 Remote Extenders to the same Local Extender				✓

Applications

- Remote storage
- Professional Audio-Visual
- Security and monitoring
- Conference rooms

Host Computer   Ethernet Switch(es)   All USB Devices

Local Extender   Remote Extender   USB Hub

Up to 100m between extender and switch and between switches over CAT 5e/6/7

Above diagram shows a LAN application with Local and Remote PCBA inside black enclosures.

USB 2.0 RG2301 Series Turnkey Specifications

RANGE

Direct Connect:	Up to 100m (330 ft) over solid core CAT 5e/6/7
Network Connect:	Up to 100m (330 ft) between switches over solid core CAT 5e/6/7

USB DEVICE SUPPORT

Max Throughputs:	USB 2.0: Up to 480 Mbps; USB 1.1: Up to 12 Mbps
Traffic/Device Types:	All USB 2.0 /1.1 traffic and device types
Maximum Number:	Up to 30 devices

LOCAL EXTENDER

USB Connector:	1 x USB Type B Receptacle
Link Connector:	1 x RJ45
PCB Footprint:	80.5mm x 33.0mm (3.2" x 1.3")
Input Power:	USB VBUS

REMOTE EXTENDER

USB Connectors:	1 x USB Type A Receptacle
Link Connector:	1 x RJ45
PCB Footprint:	80.5mm x 33.0mm (3.2" x 1.3")
Available Current:	Up to 1A at the USB port
Input Power:	5V 1.4A

ENVIRONMENTAL

Temperature:	Operating: 0°C to 50°C (32°F to 122°F) / Storage: -20°C to 70°C (-4°F to 158°F)
Operating Humidity:	20% to 80% relative humidity, non-condensing
Storage Humidity:	10% to 90% relative humidity, non-condensing

COMPLIANCE

EMC:*	FCC (Class B), CE (Class B)
Environmental:	RoHS2 (CE)

SUPPORT

Warranty:	2-year

EXTREME USB ®

* Compliance tested in RG2301 enclosure with Icron Power Adapter.

Ordering Information

The USB 2.0 RG2301 Series Turnkey is sold as either a Local Extender PCBA or Remote Extender PCBA and includes a 2-year warranty. A 5V 3A power supply and power cord are available for purchase as accessories. For more information, email sales@icron.com or call +1 604 638 3920.

PART #	NAME	DESCRIPTION
02-00106	USB 2.0 RG2301 Turnkey Local Extender	1-Port USB 2.0 100m CAT 5e/6/7 Local Extender Module (PCBA without housing)
02-00107	USB 2.0 RG2301 Turnkey Remote Extender	1-Port USB 2.0 100m CAT 5e/6/7 Remote Extender Module (PCBA without housing)
02-00115	USB 2.0 RG2301N Turnkey Local Extender	1-Port Gigabit Ethernet LAN Local Extender Module (PCBA without housing)
02-00116	USB 2.0 RG2301N Turnkey Remote Extender	1-Port Gigabit Ethernet LAN Remote Extender Module, (PCBA without housing)
02-00108	USB 2.0 RG2301GE-LAN Turnkey Local Extender	1-Port Gigabit Ethernet LAN Local Extender Module with SwitchableUSB (PCBA without housing)
02-00109	USB 2.0 RG2301GE-LAN Turnkey Remote Extender	1-Port Gigabit Ethernet LAN Remote Extender Module with SwitchableUSB (PCBA without housing)
02-00147	USB 2.0 RG2301S Turnkey Local Extender	1-Port Gigabit Ethernet LAN Local Extender Module, with Simultaneous Users Interaction (PCBA without housing)
02-00148	USB 2.0 RG2301S Turnkey Remote Extender	1-Port Gigabit Ethernet LAN Remote Extender Module, with Simultaneous Users Interaction (PCBA without housing)
21-00111	5V 3A Power Adapter	Level VI, Intnl., 1.7mm (ID) plug, IEC320-C7/C8 2-pin ▸ A power cord for your region is also required and may be purchased as an accessory