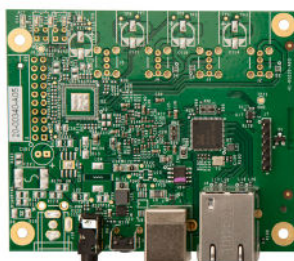# USB 2.0 RG2304 Series Turnkey
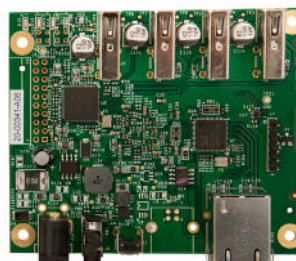## 4-port USB 2.0 Extender PCBA – 100m CAT 5e/6/7 or LAN

Sold as Turnkey PCBAs

The USB 2.0 RG2304 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.
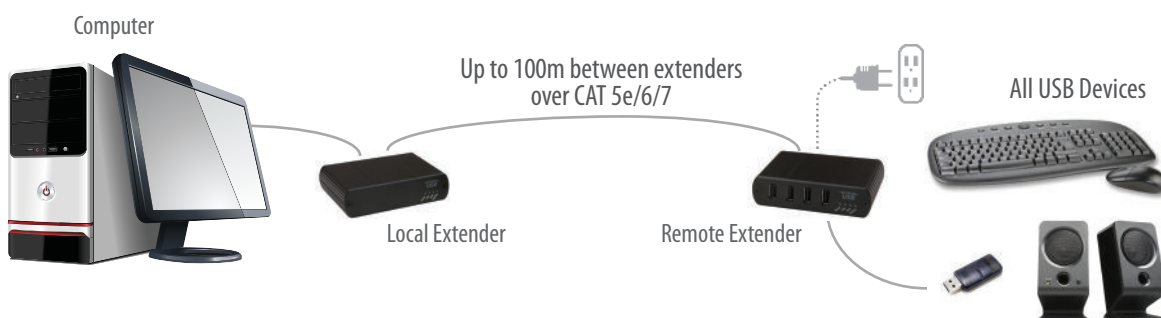

Local Extender PCBA   Remote Extender PCBA

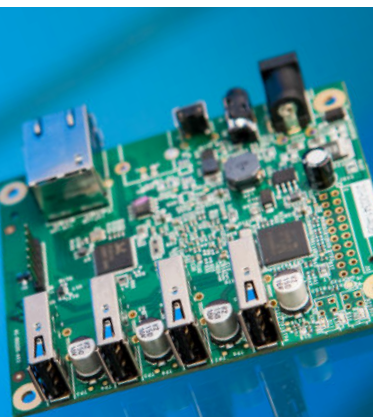| FEATURES	RG2304	RG2304N	RG2304GE-LAN	RG2304S
USB 2.0 throughput up to 480 Mbps	✓	✓	✓	✓
Four USB 2.0 ports available, use hubs to add up to 30 devices	✓	✓	✓	✓
1A of current to each port, 2.5A in total	✓	✓	✓	✓
Mass Storage Acceleration of USB 2.0 device bulk transfers	✓	✓	✓	✓
Quick install, no software 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
- Keyboard and mouse

Computer

Up to 100m between extenders
over CAT 5e/6/7

All USB Devices

Local Extender   Remote Extender

Above diagram shows a CAT 5e/6/7 application with Local and Remote PCBA inside black enclosures.

EXTREME
USB®

RANGE

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

USB DEVICE SUPPORT

Max USB 2.0 Throughput:	Up to 480 Mbps
Max USB 1.1 Throughput:	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:	85mm x 71.5mm (3.35" x 2.80")

REMOTE EXTENDER

USB Connectors:	4 x USB Type A Receptacles
Link Connector:	1 x RJ45
PCB Footprint:	85mm x 71.5mm (3.35" x 2.80")
Available Current:	Up to 1A to each USB port; 2.5A total shared
Power:	24V, 2.1mm center positive barrel (default configuration)
	5V, 1.7mm center positive barrel (option available, contact your OEM representative for details)

ENVIRONMENTAL

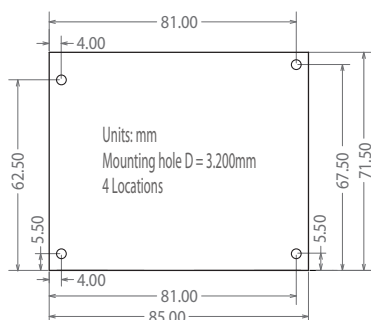|	
Temperature:	Operating: 0°C to 50°C (32°F to 122°F) / Storage: -20°C to 70°C (-4°F to 158°F)
Operating Humidity:	20% to 80% relative humidity, non-condensing
Storage Humidity:	10% to 90% relative humidity, non-condensing

COMPLIANCE

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

SUPPORT

Warranty: 2-year

Local and Remote PCBA Dimensions

Units: mm
Mounting hole D = 3.200mm
4 Locations

81.00
4.00
62.50
5.50
67.50
71.50
5.50
4.00
81.00
85.00

EXTREME USB®

* Compliance tested in RG2304 enclosure with power supply.

Ordering Information

The USB 2.0 RG2304 Series Turnkey is sold as either a Local Extender PCBA or Remote Extender PCBA in 24V (default) or 5V (optional) configurations and includes a 2-year warranty. For more information, email sales@icron.com or call +1 604 638 3920.

PART #	NAME	DESCRIPTION
02-00028	USB 2.0 RG2304 Turnkey Local Extender, 24V	1-Port USB 2.0 100m CAT 5e/6/7 Local Extender Module (PCBA without housing), 24V
02-00029	USB 2.0 RG2304 Turnkey Remote Extender, 24V	4-Port USB 2.0 100m CAT 5e/6/7 Remote Extender Module (PCBA without housing), 24V
02-00117	USB 2.0 RG2304N Turnkey Local Extender, 24V	1-Port Gigabit Ethernet LAN Local Extender Module (PCBA without housing), 24V
02-00118	USB 2.0 RG2304N Turnkey Remote Extender, 24V	4-Port Gigabit Ethernet LAN Remote Extender Module, (PCBA without housing), 24V
02-00030	USB 2.0 RG2304GE-LAN Turnkey Local Extender, 24V	1-Port Gigabit Ethernet LAN Local Extender Module with SwitchableUSB (PCBA without housing), 24V
02-00031	USB 2.0 RG2304GE-LAN Turnkey Remote Extender, 24V	4-Port Gigabit Ethernet LAN Remote Extender Module with SwitchableUSB (PCBA without housing), 24V
02-00149	USB 2.0 RG2304S Turnkey Local Extender, 24V	1-Port Gigabit Ethernet LAN Local Extender Module, with Simultaneous Users Interaction (PCBA without housing), 24V
02-00150	USB 2.0 RG2304S Turnkey Remote Extender, 24V	4-Port Gigabit Ethernet LAN Remote Extender Module, with Simultaneous Users Interaction (PCBA without housing), 24V
21-00110	24V 1A Power Adapter	24V 1A DC output, 100-240VAC input Level VI power supply with 2.1mm (ID) plug, and IEC320-C7/C8 2-pin connector ▶ A power cord for your region is also required and may be purchased as an accessory