

# Flex™

WiFi and IP Enable IR, Serial, and Relay Devices



CONNECT ALMOST ANY DEVICE TO A WIRED TCP/IP OR WIFI NETWORK IN MINUTES. SIMPLY.

The Flex is the first multi-functional IoT gateway that connects almost any electronic device to a WiFi or TCP/IP network so that it can be controlled and automated.



Global Caché's award-winning Flex WiFi and Flex IP network enables electrical devices instantly. By using a Flex IP or WiFi with any of our Flex Link cables (serial, IR, relay, and sensor), the Flex puts previously unconnected devices onto a network so they can be controlled and automated. In addition, the Flex supports HTTP for web browser control from anywhere on the network.

### Flex Family of Products

The Flex provides powerful, inexpensive, and simple connectivity to almost any electrical device so it can be controlled and automated using an app on a smartphone, tablet, or any other user interface, including system controllers and computers. Historically, automation and control products have been complex and expensive, used almost exclusively by the very wealthy. That changes with the easy availability of control apps on the iTunes Store and Android Marketplace, and the ability to connect almost any device in the home to a WiFi or wired network using the iTach Flex.

cloud-based system ensures compatibility and expandability of any system.

Once an entertainment system is under control, the next step may be the shades, or the lighting, the sprinklers, or the Jacuzzi. The iTach Flex, with its scalable and simple to use design, will connect them all at the site of the equipment, with no need for a complex rack mounted system. The iTach Flex introduces a new concept of distributed automation and control, with end-points that enhance and connect standalone devices, allowing for them to be accessed and controlled by the control system of your choice, including apps on smartphones and tablets.

For apps that support Global Caché products, visit our website at:

[www.globalcache.com/partners/control-apps](http://www.globalcache.com/partners/control-apps)



Flex Family of Products



The extremely small footprint, slightly larger than a pack of gum, is ideally suited for transparent coupling and seamless integration to any device in homes or businesses. The Flex's unique hardware form, with a WiFi or network connection to a 3.5mm jack that supports almost any type of protocol translation cable, offers the ability to bridge products and systems in a way never available before.

Entertainment systems are the most common household devices to be controlled, and most of those devices respond to IR codes, the infrared commands sent by your typical remote control. The Flex includes built-in IR learning, and Control Tower, our IR database in the cloud provides easy access to over 150,000 tested IR codes. The ease-of-use and versatility of the



#### WIRED and PoE

DVD players, flat panel TVs, remote controls, stereo components, cable boxes



#### WIFI

Speakers, TVs, computers, motorized window shades



#### FLEX LINK CABLES

Serial (RS232, RS485, and R232 Mini Jack), 2 Emitter 1 Blaster, Blaster, Emitters, Relay & Sensor, 3 Emitters



# Technical Specs

FLEX - FLEX LINK CABLES - IR EMITTER - IR BLASTER - IR TRI-PORT - SERIAL - RELAY - SENSOR

Power Input	-5V DC@250mA (90 to 230V wall power adapter included) International plugs available -USB micro adapter cable draws power from USB port (included) -802.3af compliant Power over Ethernet (PoE) model available
Setup & Configuration	Integrated web server for easy configuration and HTTP control Wireless -Adhoc network for peer-to-peer setup -WPS (WiFi Protected Setup) Pushbutton connection to the network
iHelp Setup Utility	Downloadable iHelp software simplifies network discovery and setup
IR Learning	From 20 to 200 KHz Downloadable iLearn software allows for the capture and playback of IR commands for control uses
Network Connection	DHCP and static IP Wired TCP/IP -RJ45 standard Ethernet connector -100/10 Mbits Ethernet protocol Wireless/WiFi -Infrastructure and adhoc network types -WiFi 802.11g/b with on-board antenna -WPA/WPA2 (TKIP, AES & Mixed) -WEP 64 bit and 128 bit -WPS
LED Indicators	Power and connectors to indicate activity and status
Flex Link Port	4 Conductor connection (TRRS: tip, ring, ring, sleeve) Allows for versatility through the use of our Flex Link cables
Flex Link Cables	Supports IR Out, IR Blaster, IR Tri-port, Serial (RS232/485), Relay and Sensor
Serial - RS232, RS485, and RS232 Mini Jack	See Flex Link Serial Cable Spec Sheet
Relay/Sensor	See Flex Link Relay & Sensor Cable Spec Sheet
IR Output	From 20 to 500 KHz 3.5mm connector Supports -IR Emitter, IR Blaster, 3 Emitter, 2 Emitter, 1 Blaster -IR Tri-port (emitter-emitter-emitter or emitter-emitter-blaster) -GC-CGX - For Xantech compatibility
Control APIs	TCP -ASCII textual commands compatible with iTach and GC-100 protocol -Comma delimited, carriage return terminated -Published on globalcache.com HTTP -Web-based control using HTTP commands with JSON payload data
Mounting Dock	Allows for simple installation in any location Screw down the mounting dock and Flex units can be clicked in and out as needed
Dimensions	LxWxH Wired 2.58"x1.22"x0.82" LxWxH WiFi 2.55"x1.22"x0.48"
Certifications	FCC (Part 15, Class B), C-tick, RoHs compliant

Global Caché's Flex products integrate easily with iOS and Android devices and apps. The Flex's Ethernet w/PoE connectivity, support of 8 simultaneous connections, small form factor, and many other features are the reasons why so many developers have chosen to integrate with our hardware.

**Flex devices must be used with a Flex Link cable.**

## FLEX LINK SERIAL CABLE FEATURES

- Connects almost any electrical device to a WiFi or wired Ethernet network instantly.
- Access, monitor, automate, and control standalone equipment.
- Web-based control protocol using HTTP/RESTful API.
- GC-100 and iTach compatible TCP API.
- Internal webpage configuration
- Tiny footprint.
- 4 conductor Flex Link Port allows for versatility using Flex Link cables.
- Built in IR learning and free access to free cloud-based IR database.
- Mounting dock for simple installation.
- Made in the USA and RoHS compliant.



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