

PIKA Technologies Inc. is an original equipment manufacturer of telephony enabling technology. Headquartered in Ottawa, Canada, the company has been in business since 1987.



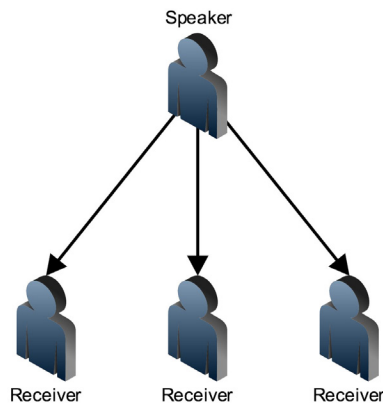
PIKA Technologies is one of the few BroadSoft® partners to offer CPE hardware solutions to complement BroadWorks®. μWARP Pager provides single and multi zone paging functionality that comes standard with most on-premise PBX systems and is compatible with the Device Manager from BroadWorks®. A web-based configuration GUI greatly simplifies installation and deployment.

On-Premise Paging provides an effective paging function and has been identified as a “must have” feature to convert SMB customers from traditional PBX’s to cloud-based hosted PBX solutions. Once installed at the customer

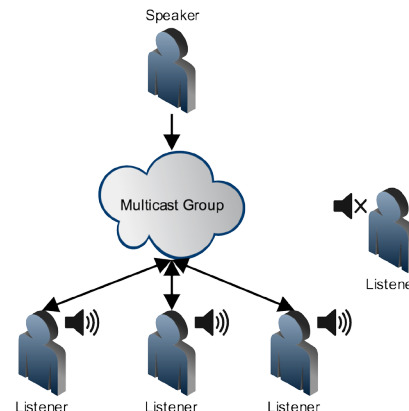
premise, zone-paging and all-page announcements are redirected through the μWARP Pager to the speakers of each IP phone in the multicast page group.

The μWARP Pager uses multicast technology to provide the paging functionality. Traditional paging requires RTP streams to be sent directly to each receiver. In this scenario, unnecessary bandwidth is required as well as extra licenses on a Broadsoft® switch. Instead with μWARP Pager’s Multicast paging, a single RTP stream is sent to the Multicast address and all clients (phones) that “subscribed” to that address will receive the same RTP stream without any overhead and duplication. This will dramatically reduce bandwidth on both LAN and WAN by the factor of n-1 (n being a number of endpoints to be paged)

You can envision that the speaker and listeners are in the same room and when speaker says something, every listener in that room is able to hear it so there is no need for speaker to repeat every word to each listener again and again. You can find an illustration of the difference between Broadcast and Multicast Methods below.

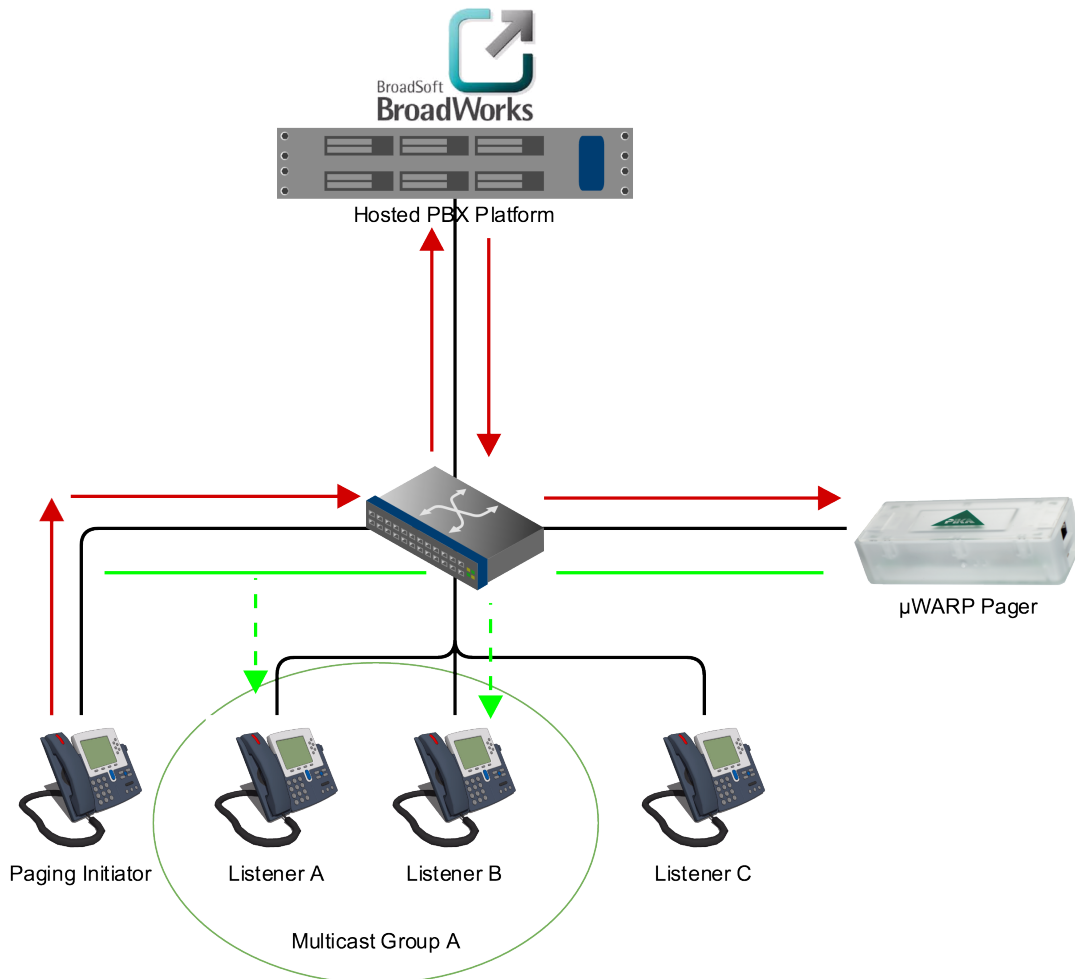


Broadcast Audio



Multicast Audio

Here is a diagram showing the μWARP Pager communication.



The stream path for the initiator of the page is shown with red arrows. As you can see from the diagram, when initiator starts a page call, the call is forwarded to μWARP pager by Broadworks®. Then μWARP pager sends the received RTP to the multicast paging address. This traffic is shown with green arrow. All of the packets will be received by the devices connected to the network but will only be processed by the devices configured to listen that specific multicast address. In this case these are Listener A and Listener B.

The μWARP Pager effectively offloads the unusual WAN bandwidth spikes associated with paging to the LAN network while providing the local paging function that users of traditional legacy PBX systems are familiar with.

Features & Benefits



μ WARP Pager comes from PIKA's 20+ years of developing telephony solutions. It's built on the commercial grade μ WARP Appliance and benefits from an attractive, brandable appearance in a small form factor. It is eco-friendly, consuming low power and the solid-state design insures reliable operation.

General

- Simple solution, allowing service providers to solve their customer premise needs
- BroadSoft® BroadWorks® compatible
- Easily adaptable to other hosted PBX platforms
- Easily brandable – promote your business or product brand
- Isolated from hosted system: can be installed or removed without disruption to live system
- 2 Full duplex Ethernet ports 10/100Mbps
- Ethernet LEDs and status LEDs

Software

- Simple and rapid configuration is accomplished thru a web based configuration GUI
- Customer can install themselves when preconfigured by the service provider

Hardware

- Reset button
- Hardware watchdog reset
- Unit dimensions: 98mm x 38mm x 27mm (~ 3.8" x 1.5" x 1.1")
- Box dimensions: 250mm x 170mm x 60mm (~9.75" x 6.75" x 2.4")
- External power supply with USB type A plug (AC 110-240V, 50-60Hz)
- Power consumption: 4W
- Operating temperature: 0°C to 45°C
- Storage temperature: -20°C to +85°C
- Humidity, non-condensing: 5% – 95%

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What's the difference between WARP Plus and μ WARP Pager?

WARP Plus is for customers that need more than one feature for their hosted PBX service. μ WARP Pager only supports multicast paging and optionally MOH.

Can I create multiple paging zones in μ WARP Pager?

Yes. The device supports up to 10 different multicast paging zones, however, your CPE must support multiple multicast paging addresses too. Some of the CPE's in the market only support one multicast paging zone.

Which IP Phones can I use with the μ WARP Pager?

Any IP Phones that support multicast paging. Vendors like Yealink, Cisco, Snom, Aastra , Grandstream etc. have multicast paging support in their products. We advice you to consult the manufacturers manual to get information about "Multicast paging support" of specific devices.

How can I connect overhead speakers to the μ WARP Pager?

There are some overhead speaker systems that support SIP and Multicast paging feature. You can connect and use these equipment within the system.

Which multicast addresses can I use for paging in μ WARP Pager?

The ipv4 multicast addresses are in the range of 224.0.0.0 through 239.255.255.255 and you can get detailed information about multicast address space from <http://www.iana.org/assignments/multicast-addresses/multicast-addresses.xhtml> . Technically you can use any multicast ip address within this range but we advice you to be sure that there isn't any overlapping service on the network with the same multicast address and port. Also the multicast address that you can use depends on your IP Phone. Some phones are coming with Hard coded Multicast addresses so you have to make your configuration according to vendor's requirements.

How can I configure the unit?

You can configure the unit using the web based GUI or you can provision the unit by TFTP or HTTPS.

Which versions of Broadworks do you support?

The solution is using Generic features so technically it does not depend on the version of the Broadworks® platform.