Package Contents:
- USR4504 1G Variable 4 Port Aggregator & Regenerator with attached mounting bracket for use with USR4500-RMK
- 1 AC Power supply with power cords for US, UK/IRE, Europe
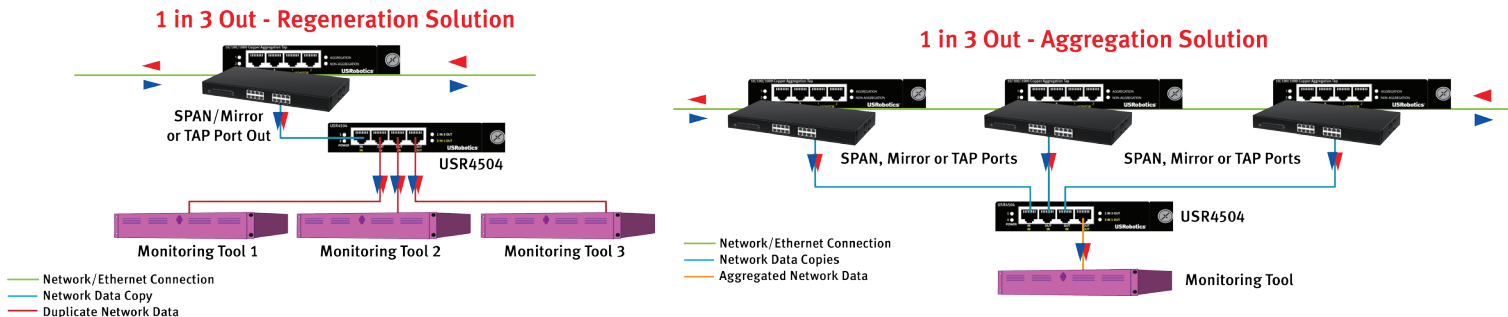- Information Card

The USR4504 1G Variable 4 Port Aggregator & Regenerator can either be used to aggregate multiple copies of traffic together for a single monitoring tool or duplicate traffic for multiple monitoring tools. In our example below, we show the output from a tapped link being combined with the output from a SPAN port.

Installation
The ports on the USR4504 are used to connect to different devices based on the position of the dip switch on the back of the unit.

1 IN 3 OUT: In this mode, the port 1 is connected to a location on the network that is making a copy of traffic from a SPAN, Mirror, or Tap monitoring port. Ports 2-4 generate copies of this traffic and connect to separate monitoring tools. Each tool receives a full copy of the traffic.

3 IN 1 OUT: In this mode, the ports 1-3 are connected to locations on the network that are making copies of traffic, like SPAN, Mirror, or Tap monitoring ports. Port 4 is connects to the monitoring tool that needs access to the aggregate traffic.
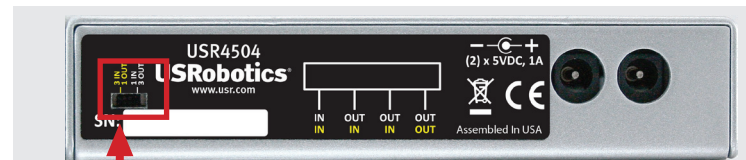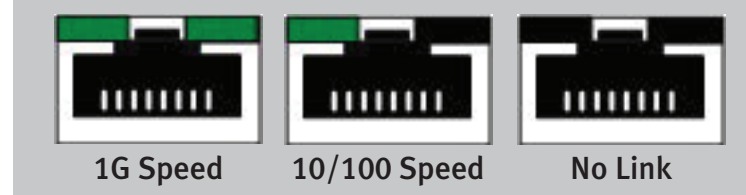

Switch Settings
A convenient switch on the back of the tap can be used to toggle between each mode. When set to "1 IN 3 OUT", Ports 2, 3, and 4 will transmit the traffic being received on port 1. When the device is set to "3 IN 1 OUT" mode, Port 4 will transmit a copy of all traffic received on ports 1, 2, and 3.

Additional features
- The USR4504 supports dual redundant power supplies. One power supply is provided, a second can be sourced from USR. When used with two power supplies the device will remain powered even if one power supply fails. It is recommended that each power supply is connected to a separate circuit breaker to minimize the risk of power loss.
- The USR4504 supports passing Power-Over-Ethernet (PoE) on all network ports.
- Supports frame sizes up to 10,240 bytes

Selectable Switch

| 1G Speed | 10/100 Speed | No Link |

![USR - A Division of UNICOM Global logo]

1G Variable 4 Port Aggregator & Regenerator
USR4504 - Installation Guide

Installation Notes:

- Before setting the USR4504 to "3 IN 1 OUT" mode, it is important to consider the link utilization on the ports 1, 2, and 3. If the combined traffic over these ports exceed the speed of the monitoring devices, loss of traffic through the USR4504 ports will occur.
- All ports on the USR4504 are set to AUTO speed negotiation. If these ports are connected to devices with manual speed settings, confirm that the devices on the either side of the tap are at the same speed. For optimal results set all devices to AUTO speed negotiation.
- It is recommended that the endpoint devices connected to each network port are capable of the same maximum speed. Oversubscription may occur if the speeds are mismatched.
- MDI-X may need to be turned off on some network devices connected to the tap for proper communication.
- Power supplies should be connected to outlets with different circuit breakers to maintain maximum uptime.
- The maximum cable length between network devices (not including the tap) should be 90m
- Rack mount USR4500-RMK is available separately to mount 3 units horizontally.

Warranty and Support Information:

This product is subject to the U.S. Robotics Corporation Limited Warranty. To view a copy of the Limited Warranty, please see: **www.usr.com/support/4504**

For information on how to contact USR Technical Support, please see the USR corporate website at: **www.usr.com/support**

Regulatory Information:

CE Compliance
Declaration of Conformity
Hereby, U.S. Robotics Corporation, declares that this device, USR 1G Variable 4 Port Aggregator & Regenerator, is in compliance with the essential requirements and other relevant provisions of EMC Directive 89/366/EEC and Low Voltage Directive 98/68/EEC. An electronic copy of the original CE Declaration of Conformity is available at the USR website: **www.usr.com**

This product is subject to Directive 2012/19/EU of the European Parliament and the Council of the European Union on waste electrical and electronic equipment (WEEE) and, in jurisdictions adopting that Directive, is marked as being put on the market after August 13, 2005, and should not be disposed of as unsorted municipal waste. Please utilize your local WEEE collection facilities in the disposition of this product and otherwise observe all applicable requirements. For further information on the requirements regarding the disposition of this product and collection facilities that may be available to you, please visit: **www.usr.com/weee**
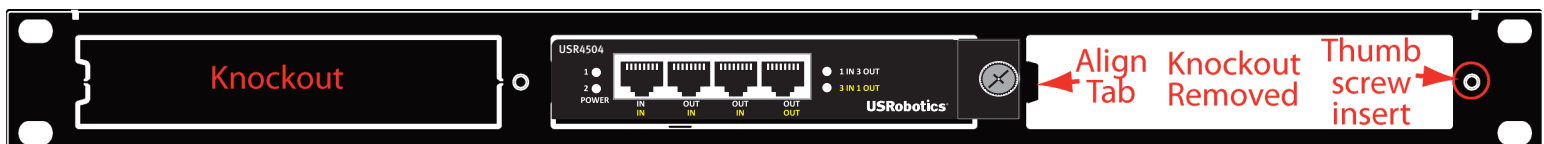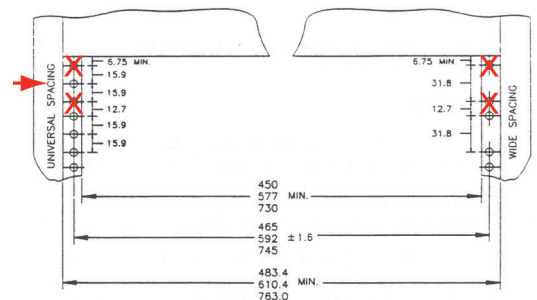
This product is subject to Directive 2011/65/EU of the European Parliament and the Council ofthe European Union on restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and, in jurisdictions adopting that Directive. For further information regarding this product, please visit: **www.usr.com/rohs**

Equipment Rack Installation:

- Select a location and align the 1G Variable 4 Port Aggregator & Regenerator thumb screw with the corresponding universal flange middle hole.

  WARNING: Installing on a wide flange hole will result in the tap invading an adjoining standard 1U rackspace, unless a rackmout kit is used. The 19" 1U USR4500-RMK Rackmount Installation Kit is available for up to three units.

- Tighten the thumb screw until the tap is secure in the rack.

19" 1U USR4500-RMK Rackmount

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