



MERIT LILIN ENT. CO.,LTD

No.20, Wu-Kong 6 Rd., Wu-Ku Industrial Zone, Wu-Ku Hsiang, Taipei Hsien, Taiwan, R.O.C.
Tel: 886-2-2298 8988 Fax: 886-2-2298 9077 Website: www.meritlilin.com

24 Port Giga Switch

Model Name: PMH-EW24V

Test Report

PCB Version : V2B

Tested: Peter Chen Date: 2011-11-07

Checked: Date:

Approved: Date:

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1. Power Consumption Test

Purpose : Measure the power consumption.

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
POWER SUPPLY	1pcs	GPC-3060D
UTP CAT5e Cable	24pcs	100m

Test Setup:

1. Connect power supply output to DUT input.
2. Connect all DUT port to SMB-6000B
3. Let SMB-6000B transmit and receive data.
4. Record the power supply consumption.

Procedure:

1. Turn on the DUT and SMB-6000B
2. Set SMB-6000B to traffic random packet, and set transmit mode to continue.
3. Measure the power consumption.

Results Table :

48VDC IN	LINK	ACTIVE	Unit
System initial	0.25	N/A	A
	12.0	N/A	W
24 Port 10Mbps	0.27	0.34	A
	12.96	16.32	W
24 Port 100Mbps	0.27	0.27	A
	12.96	12.96	W
24 Port 1000Mbps	0.40	0.41	A
	19.2	19.68	W



2. Port Connect & LED State

Purpose : Make sure all Port Connect and LED Functions are working as the product specification.

Reference : Product defined specification.

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
POWER SUPPLY	1pcs	GPC-3060D
UTP CAT5e Cable	24pcs	100m

Port Connect and LED Function:

1. POWER LED:

When turn the power to on. The Power LED steady Amber light.

2. Link/ACT LED:

When Ethernet link. The Link/ACT LED be steady Green light.

When Ethernet data active. The Link/ACT LED be Blinking Green light

3. SPEED LED

When Ethernet link Speed are 10Mbps or 100Mbps. The Speed LED is off.

When Ethernet link at 1000Mbps. The Speed LED steady Green light.

Results Table:

Power LED

POWER LED	PWR LED
Power Up	illumine
Power Down	OFF

10Mbps LINK PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	illumine	illumine	illumine	illumine	



10Mbps Active PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	Blinking	Blinking	Blinking	Blinking	

100Mbps LINK PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	illumine	illumine	illumine	illumine	

100Mbps Active PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	Blinking	Blinking	Blinking	Blinking	



1000Mbps LINK PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	illumine	illumine	illumine	illumine	illumine
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	illumine	illumine	illumine	illumine	

1000Mbps Active PORT LED Be-Happen

LED	Port 1	Port 2	Port 3	Port 4	Port 5
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 6	Port 7	Port 8	Port 9	Port 10
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 11	Port 12	Port 13	Port 14	Port 15
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 16	Port 17	Port 18	Port 19	Port 20
LNK/ACT	Blinking	Blinking	Blinking	Blinking	Blinking
LED	Port 21	Port 22	Port 23	Port 24	
LNK/ACT	Blinking	Blinking	Blinking	Blinking	



3. Throughput Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
UTP CAT5e Cable	24pcs	100m

Network Configuration: Netcom SmartBit / Smart Applications.

Purpose: To test maximum rate at which none of offered frames to be dropped by device.

Procedure:

1. Run "Throughput" applications by clicking on the associated button.
2. Record all results in the following table.

Test Results :

Spirent Communications - SmartBits Throughput Test Results							
Vendor Name: Vendor							
Product Name: Product							
Software Version: SmartApplications V 2.50							
Library Version: 3.12-115							
Firmware Version: 2.80.80...							
Serial Number: 60012392							
Throughput test length: 30 seconds							
Average of: 1 trial							
Port pairs active: 12							
Mode: Uni-directional							
Date: Fri Apr 15 14:53:36 2011							
Maximum port-pair throughput with no loss							
=====							
Frame size	64	128	256	512	1024	1280	1518
1 Gb Max Rate	1488095	844595	452899	234962	119732	96154	81274
Avg % passed	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Acceptable Loss %	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Avg Tx Time(s)	30.000	30.000	30.000	30.000	30.000	30.000	30.000

(01,01,01) to (01,01,02)	1488069	844579	452890	234958	119730	96152	81273
(01,02,01) to (01,02,02)	1488077	844584	452893	234959	119730	96153	81273
(01,03,01) to (01,03,02)	1488074	844582	452892	234959	119730	96152	81273
(01,04,01) to (01,04,02)	1488068	844579	452890	234958	119730	96152	81273
(01,05,01) to (01,05,02)	1488081	844586	452894	234960	119731	96153	81274
(01,06,01) to (01,06,02)	1488102	844598	452901	234963	119732	96154	81275
(01,07,01) to (01,07,02)	1488093	844593	452898	234962	119732	96154	81274
(01,08,01) to (01,08,02)	1488102	844598	452900	234963	119732	96154	81275
(01,09,01) to (01,09,02)	1488064	844577	452889	234958	119729	96152	81273
(01,10,01) to (01,10,02)	1488102	844598	452901	234963	119732	96154	81275
(01,11,01) to (01,11,02)	1488080	844586	452894	234960	119731	96153	81274
(01,12,01) to (01,12,02)	1488083	844588	452895	234961	119731	96153	81274
=====							
Frame size	64	128	256	512	1024	1280	1518
(01,01,01) to (01,01,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,02,01) to (01,02,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,03,01) to (01,03,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,04,01) to (01,04,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,05,01) to (01,05,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,06,01) to (01,06,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,07,01) to (01,07,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,08,01) to (01,08,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,09,01) to (01,09,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,10,01) to (01,10,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,11,01) to (01,11,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
(01,12,01) to (01,12,02)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Throughput SUMMARY: Total Port-Pairs							
Frame size	64	128	256	512	1024	1280	1518
Maximum Rate	1785714010135140	5434788	2819544	1436784	1153848	975288	
FPS Passed Rate	1785699510135048	5434737	2819524	1436770	1153836	975286	
Percentage	100.00	100.00	100.00	100.00	100.00	100.00	100.00



4. Frame Loss Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
UTP CAT5e Cable	24pcs	100m

Network Configuration: Netcom SmartBit / Smart Applications.

Purpose: To test percentage of frames that should have been forwarded by a network device under steady state load that was not forwarded due to a lack of resource.

Procedure:

1. Run "Packet Loss" applications by clicking on the associated button.
2. Record all results in the following table.

Test Results :

Spirent Communications - SmartBits PacketLoss Test Results							
Vendor Name: Vendor							
Product Name: Product							
Software Version: SmartApplications V 2.50							
Library Version: 3.12-115							
Firmware Version: 2.80.80...							
Serial Number: 60012392							
PacketLoss test length: 30 seconds							
Average of: 1 trial							
Port pairs active: 12							
Mode: Uni-directional							
Date: Fri Apr 15 10:29:22 2011							
Port-Pair PacketLoss as a percentage of total							
=====							
Frame size	64	128	256	512	1024	1280	1518
Max attempted	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(01,01,01) to (01,01,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,02,01) to (01,02,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,03,01) to (01,03,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,04,01) to (01,04,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,05,01) to (01,05,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,06,01) to (01,06,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,07,01) to (01,07,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,08,01) to (01,08,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,09,01) to (01,09,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,10,01) to (01,10,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,11,01) to (01,11,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(01,12,01) to (01,12,02)	0.000	0.000	0.000	0.000	0.000	0.000	0.000



5. Latency Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
UTP CAT5e Cable	24pcs	100m

Network Configuration: Netcom SmartBit / Smart Applications.

Purpose: To test the time interval starting when the end of the first bit of the input frame reaches the input port and ending when the start of the bit of the frame is been on the output port.

Procedure:

1. Run "Latency" applications by clicking on the associated button.
2. Record all results in the following table.

Test Results :

Spirent Communications - SmartBits Latency Test Results							
Vendor Name: Vendor							
Product Name: Product							
Software Version: SmartApplications V 2.50							
Library Version: 3.12-115							
Firmware Version: 2.80.80...							
Serial Number: 60012392							
Latency test length: 30 seconds							
Average of: 1 trial							
Port pairs active: 12							
Mode: Uni-directional							
Date: Fri Apr 15 09:49:36 2011							
Mode: SmartMetrics Comp. Mode							
(Cut Through)Port-Pair Latency in microseconds (us) [or ms where noted]							
=====							
Frame size	64	128	256	512	1024	1280	1518

Percent load	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(01,01,01) to (01,01,02)	4.5	5.3	6.8	10.0	16.3	19.6	22.5
(01,02,01) to (01,02,02)	4.5	5.3	6.9	9.9	16.3	19.5	22.5
(01,03,01) to (01,03,02)	4.7	5.5	7.1	10.3	16.6	19.7	22.7
(01,04,01) to (01,04,02)	4.5	5.5	6.9	10.1	16.5	19.7	22.6
(01,05,01) to (01,05,02)	4.4	5.2	6.7	10.0	16.3	19.4	22.4
(01,06,01) to (01,06,02)	36.8	38.8	40.6	43.8	49.1	52.6	55.3
(01,07,01) to (01,07,02)	4.5	5.4	6.9	10.1	16.3	19.6	22.5
(01,08,01) to (01,08,02)	32.3	32.4	33.2	36.2	41.5	44.2	47.1
(01,09,01) to (01,09,02)	4.2	5.1	6.6	9.7	16.1	19.3	22.3
(01,10,01) to (01,10,02)	37.1	41.5	43.9	48.6	54.1	57.1	59.9
(01,11,01) to (01,11,02)	4.4	5.2	6.7	9.9	16.2	19.4	22.4
(01,12,01) to (01,12,02)	4.2	5.1	6.6	9.7	16.1	19.4	22.3
(Store and Forward) Port-Pair Latency in microseconds (us) [or ms where noted]							
=====							
Frame size	64	128	256	512	1024	1280	1518
Percent load	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(01,01,01) to (01,01,02)	4.0	4.3	4.8	6.0	8.2	9.4	10.4
(01,02,01) to (01,02,02)	4.0	4.3	4.9	5.9	8.2	9.3	10.4
(01,03,01) to (01,03,02)	4.2	4.5	5.1	6.3	8.5	9.5	10.6
(01,04,01) to (01,04,02)	4.0	4.5	4.9	6.1	8.4	9.5	10.5
(01,05,01) to (01,05,02)	3.9	4.2	4.7	6.0	8.2	9.2	10.3
(01,06,01) to (01,06,02)	36.3	37.8	38.6	39.8	41.0	42.4	43.2
(01,07,01) to (01,07,02)	4.0	4.4	4.9	6.1	8.2	9.4	10.4
(01,08,01) to (01,08,02)	31.8	31.4	31.2	32.2	33.4	34.0	35.0
(01,09,01) to (01,09,02)	3.7	4.1	4.6	5.7	8.0	9.1	10.2
(01,10,01) to (01,10,02)	36.6	40.5	41.9	44.6	46.0	46.9	47.8
(01,11,01) to (01,11,02)	3.9	4.2	4.7	5.9	8.1	9.2	10.3
(01,12,01) to (01,12,02)	3.7	4.1	4.6	5.7	8.0	9.2	10.2



6. Back to Back Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
UTP CAT5e Cable	24pcs	100m

Network Configuration: Netcom SmartBit / Smart Applications.

Purpose: To test fixed length frames presented at a rate such that there is the minimum legal separation for a given medium between frames over a sort to medium period of time, starting from an idle state.

Procedure:

1. Run "Back-to-Back" applications by clicking on the associated button.
2. Record all results in the following table.

Test Results :

Spirent Communications - SmartBits Back-to-back Test Results							
Vendor Name: Vendor							
Product Name: Product							
Software Version: SmartApplications V 2.50							
Library Version: 3.12-115							
Firmware Version: 2.80.80...							
Serial Number: 60012392							
Back-to-back test length: 5 seconds							
Average of: 1 trial							
Port pairs active: 12							
Mode: Uni-directional							
Date: Fri Apr 15 12:00:58 2011							
Port-Pair Back-to-back							
=====							
Frame size	64	128	256	512	1024	1280	1518
1 Gb offered	7440475	4222975	2264495	1174810	598660	480770	406370



Burst Seconds	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Offered %	100.00	100.00	100.00	100.00	100.00	100.00	100.00

-							
(01,01,01) to (01,01,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,02,01) to (01,02,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,03,01) to (01,03,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,04,01) to (01,04,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,05,01) to (01,05,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,06,01) to (01,06,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,07,01) to (01,07,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,08,01) to (01,08,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,09,01) to (01,09,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,10,01) to (01,10,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,11,01) to (01,11,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
(01,12,01) to (01,12,02)	7440475	4222975	2264495	1174810	598660	480770	
406370							
Back-to-back SUMMARY: Total Port-Pairs							
=====							
Frame size	64	128	256	512	1024	1280	1518

-							
Frames Rcv'd	89285700	50675700	27173940	14097720	7183920	5769240	
4876440							

7. General Function Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
IXIA	1pcs	IXIA1600
UTP CAT5e Cable	24pcs	100m

Network Configuration: IXIA / IxExplorer.

Purpose: Make sure DUT works on 100m CAT5E cable, and DUT without any oversize, undersize, packet loss, CRC error.

Procedure:

1. Using IXIA1600 to transmit on each port sequentially.
2. Record the IXIA1600 Counter contents for all ports.

Results Table:

Port	1	2	3	4	5	6
oversize	0	0	0	0	0	0
undersize	0	0	0	0	0	0
packet loss	0	0	0	0	0	0
CRC error	0	0	0	0	0	0
Port	7	8	9	10	11	12
oversize	0	0	0	0	0	0
undersize	0	0	0	0	0	0
packet loss	0	0	0	0	0	0
CRC error	0	0	0	0	0	0
Port	13	14	15	16	17	18
oversize	0	0	0	0	0	0
undersize	0	0	0	0	0	0
packet loss	0	0	0	0	0	0
CRC error	0	0	0	0	0	0
Port	19	20	21	22	23	24
oversize	0	0	0	0	0	0
undersize	0	0	0	0	0	0
packet loss	0	0	0	0	0	0
CRC error	0	0	0	0	0	0



Results: 100m CAT5E cable.

1000Mbps Port 1~4

Name	Port 1	Port 2	Port 3	Port 4
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	79014913120	78997120717	78993904448	78991804987
Bytes Received	78997120717	79014913120	78991804987	78993904448
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0

1000Mbps Port 5~8

Name	Port 5	Port 6	Port 7	Port 8
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	78999778586	78996663686	79026402057	79028884082
Bytes Received	78996663686	78999778586	79028884082	79026402057
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0



1000Mbps Port 9~12

Name	Port 9	Port 10	Port 11	Port 12
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	79002635881	78998699159	78986048315	78990353837
Bytes Received	78998699159	79002635881	78990353837	78986048315
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0

1000Mbps Port 13~16

Name	Port 13	Port 14	Port 15	Port 16
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	78993748262	79000166309	79015025803	79007043720
Bytes Received	79000166309	78993748262	79007043720	79015025803
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0



1000Mbps Port 17~20

Name	Port 17	Port 18	Port 19	Port 20
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	79005136638	79002541233	78999487140	78994063173
Bytes Received	79002541233	79005136638	78994063173	78999487140
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0

1000Mbps Port 21~24

Name	Port 21	Port 22	Port 23	Port 24
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Frames Sent	100000000	100000000	100000000	100000000
Valid Frames Received	100000000	100000000	100000000	100000000
Bytes Sent	79001908577	78992029486	79007683328	79011880216
Bytes Received	78992029486	79001908577	79011880216	79007683328
Fragments	0	0	0	0
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0



8. 10/100/1000M Full/Half Duplex Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
SmartBit	1pcs	SMB-6000B
UTP CAT5e Cable	24pcs	100m

Network Configuration: Netcom SmartBit / SmartWindow.

Purpose: Make sure DUT works on 100m CAT5E cable, the Full/Half Duplex will working normally.

Procedure:

1. Using SmartBit to transmit on each port sequentially.
2. Record the SmartBit Counter contents for all ports.

Results Table:

Port	1	2	3	4	5	6
10M Full	PASS	PASS	PASS	PASS	PASS	PASS
10M Half	PASS	PASS	PASS	PASS	PASS	PASS
100M Full	PASS	PASS	PASS	PASS	PASS	PASS
100M Half	PASS	PASS	PASS	PASS	PASS	PASS
1000M	PASS	PASS	PASS	PASS	PASS	PASS
Port	7	8	9	10	11	12
10M Full	PASS	PASS	PASS	PASS	PASS	PASS
10M Half	PASS	PASS	PASS	PASS	PASS	PASS
100M Full	PASS	PASS	PASS	PASS	PASS	PASS
100M Half	PASS	PASS	PASS	PASS	PASS	PASS
1000M	PASS	PASS	PASS	PASS	PASS	PASS
Port	13	14	15	16	17	18
10M Full	PASS	PASS	PASS	PASS	PASS	PASS
10M Half	PASS	PASS	PASS	PASS	PASS	PASS
100M Full	PASS	PASS	PASS	PASS	PASS	PASS
100M Half	PASS	PASS	PASS	PASS	PASS	PASS
1000M	PASS	PASS	PASS	PASS	PASS	PASS
Port	19	20	21	22	23	24
10M Full	PASS	PASS	PASS	PASS	PASS	PASS



10M Half	PASS	PASS	PASS	PASS	PASS	PASS
100M Full	PASS	PASS	PASS	PASS	PASS	PASS
100M Half	PASS	PASS	PASS	PASS	PASS	PASS
1000M	PASS	PASS	PASS	PASS	PASS	PASS

Results: 10Mbps Full

Port1~4

	Events	Events	Events	Events
	Port 1A-01 LAN-3300A	Port 1A-02 LAN-3300A	Port 1B-01 LAN-3300A	Port 1B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,364,433	66,425,263	66,541,075	66,774,644
Rx Bytes	66,425,263	66,364,433	66,774,708	66,541,139
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port5~8

	Events	Events	Events	Events
	Port 2A-01 LAN-3300A	Port 2A-02 LAN-3300A	Port 2B-01 LAN-3300A	Port 2B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,874,227	66,611,351	66,474,498	66,688,400
Rx Bytes	66,611,415	66,874,291	66,688,464	66,474,562
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port9~12

	Events	Events	Events	Events
	Port 3A-01 LAN-3300A	Port 3A-02 LAN-3300A	Port 3B-01 LAN-3300A	Port 3B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,685,979	66,770,651	66,716,261	66,806,119
Rx Bytes	66,770,715	66,686,043	66,806,183	66,716,325
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port13~16

	Events	Events	Events	Events
	Port 4A-01 LAN-3300A	Port 4A-02 LAN-3300A	Port 4B-01 LAN-3300A	Port 4B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,733,156	66,764,393	66,644,914	66,702,475
Rx Bytes	66,764,457	66,733,220	66,702,539	66,644,978
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port17~20

	Events	Events	Events	Events
	Port 5A-01 LAN-3300A	Port 5A-02 LAN-3300A	Port 5B-01 LAN-3300A	Port 5B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,587,886	66,797,677	66,513,138	66,448,325
Rx Bytes	66,797,741	66,587,950	66,448,389	66,513,202
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port21~24

	Events	Events	Events	Events
	Port 6A-01 LAN-3300A	Port 6A-02 LAN-3300A	Port 6B-01 LAN-3300A	Port 6B-02 LAN-3300A
Tx Frames	100,000	100,000	100,000	100,000
Rx Frames	100,001	100,001	100,001	100,001
Tx Bytes	66,797,882	66,724,832	66,589,511	66,536,480
Rx Bytes	66,724,896	66,797,946	66,536,544	66,589,575
Tx Triggers	0	0	0	0
Rx Triggers	100,000	100,000	100,000	100,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

**Results: 10Mbps Half**

Port1~4

Name	loopback:01.01	loopback:01.02	loopback:01.03	loopback:01.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99676	99694	99689	99685
Valid Frames Received	99696	99678	99687	99691
Bytes Sent	78832252	79166753	78791986	79079010
Bytes Received	79104746	78764336	79015818	78727401
Fragments	11948	11603	11660	11715
Collisions	11948	11603	11660	11715
Collision Frames	4374	4034	4218	4023
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port5~8

Name	loopback:02.01	loopback:02.02	loopback:02.03	loopback:02.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99683	99690	99700	99684
Valid Frames Received	99692	99685	99686	99702
Bytes Sent	78694140	78976212	78873962	78771856
Bytes Received	78906641	78629228	78703383	78807995
Fragments	11918	12177	11986	12156
Collisions	11918	12177	11986	12156
Collision Frames	4192	4528	4325	4368
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port9~12

Name	loopback:03.01	loopback:03.02	loopback:03.03	loopback:03.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99674	99687	99713	99687
Valid Frames Received	99689	99676	99689	99715
Bytes Sent	78891020	78898131	78837422	78789087
Bytes Received	78849830	78837529	78742616	78792694
Fragments	11675	11246	10448	10603
Collisions	11675	11246	10448	10603
Collision Frames	4043	3831	3638	3471
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port13~16

Name	loopback:04.01	loopback:04.02	loopback:04.03	loopback:04.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99723	99686	99711	99683
Valid Frames Received	99688	99725	99685	99713
Bytes Sent	78987003	78923848	79000883	78781258
Bytes Received	78876175	78940602	78733591	78954944
Fragments	10595	10710	10574	10712
Collisions	10595	10710	10574	10712
Collision Frames	3815	3431	3654	3542
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port17~20

Name	loopback:05.01	loopback:05.02	loopback:05.03	loopback:05.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99687	99694	99685	99693
Valid Frames Received	99696	99689	99695	99687
Bytes Sent	78780808	78732636	79043667	79010697
Bytes Received	78671681	78716398	78944768	78976758
Fragments	11635	11369	12008	11941
Collisions	11635	11369	12008	11941
Collision Frames	4155	4005	4312	4245
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port21~24

Name	loopback:06.01	loopback:06.02	loopback:06.03	loopback:06.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	10 Mbps	10 Mbps	10 Mbps	10 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	99683	99733	99691	99699
Valid Frames Received	99735	99685	99701	99693
Bytes Sent	78681065	78911271	78825237	79089915
Bytes Received	78849617	78615593	79024031	78765739
Fragments	11752	11470	11436	11849
Collisions	11752	11470	11436	11849
Collision Frames	4137	4290	3979	4391
Oversize and CRC Errors	N/A	N/A	N/A	N/A



Results: 100Mbps Full

Port1~4

	Events	Events	Events	Events
	Port 1A-01 LAN-3300A	Port 1A-02 LAN-3300A	Port 1B-01 LAN-3300A	Port 1B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	665,940,895	666,172,191	666,400,749	666,370,683
Rx Bytes	666,172,255	665,940,959	666,370,747	666,400,813
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port5~8

	Events	Events	Events	Events
	Port 2A-01 LAN-3300A	Port 2A-02 LAN-3300A	Port 2B-01 LAN-3300A	Port 2B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	667,262,586	666,613,486	666,016,183	666,382,146
Rx Bytes	666,613,550	667,262,650	666,382,210	666,016,247
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port9~12

	Events	Events	Events	Events
	Port 3A-01 LAN-3300A	Port 3A-02 LAN-3300A	Port 3B-01 LAN-3300A	Port 3B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	665,918,623	666,522,360	666,250,189	666,334,840
Rx Bytes	666,522,424	665,918,687	666,334,904	666,250,253
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port13~16

	Events	Events	Events	Events
	Port 4A-01 LAN-3300A	Port 4A-02 LAN-3300A	Port 4B-01 LAN-3300A	Port 4B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	666,479,910	666,194,590	666,358,416	666,219,831
Rx Bytes	666,194,654	666,479,974	666,219,895	666,358,480
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port17~20

	Events	Events	Events	Events
	Port 5A-01 LAN-3300A	Port 5A-02 LAN-3300A	Port 5B-01 LAN-3300A	Port 5B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	666,575,469	666,265,380	666,904,404	665,331,253
Rx Bytes	666,265,444	666,575,533	665,331,317	666,904,468
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port21~24

	Events	Events	Events	Events
	Port 6A-01 LAN-3300A	Port 6A-02 LAN-3300A	Port 6B-01 LAN-3300A	Port 6B-02 LAN-3300A
Tx Frames	1,000,000	1,000,000	1,000,000	1,000,000
Rx Frames	1,000,001	1,000,001	1,000,001	1,000,001
Tx Bytes	666,348,429	666,128,342	666,420,961	666,897,543
Rx Bytes	666,128,406	666,348,493	666,897,607	666,421,025
Tx Triggers	0	0	0	0
Rx Triggers	1,000,000	1,000,000	1,000,000	1,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

**Results: 100Mbps Half**

Port1~4

Name	loopback:01.01	loopback:01.02	loopback:01.03	loopback:01.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996900	996849	996919	996850
Valid Frames Received	996850	996901	996851	996920
Bytes Sent	790015013	790527493	791153803	790815009
Bytes Received	789676074	789178122	789989956	790308510
Fragments	118039	118667	117654	117665
Collisions	118039	118667	117654	117665
Collision Frames	42571	42654	42533	41879
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port5~8

Name	loopback:02.01	loopback:02.02	loopback:02.03	loopback:02.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996915	996851	996836	996885
Valid Frames Received	996852	996916	996886	996837
Bytes Sent	790489334	790846899	790522873	790843525
Bytes Received	789922679	789670125	789975504	789688423
Fragments	119219	119640	118228	119095
Collisions	119219	119640	118228	119095
Collision Frames	43050	42913	42269	42837
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port9~12

Name	loopback:03.01	loopback:03.02	loopback:03.03	loopback:03.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996953	996820	996858	996846
Valid Frames Received	996821	996954	996847	996859
Bytes Sent	790720746	790284319	789795324	789993741
Bytes Received	789542013	790062636	789283559	789152658
Fragments	116779	119484	117773	118526
Collisions	116779	119484	117773	118526
Collision Frames	42055	42604	41732	42490
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port13~16

Name	loopback:04.01	loopback:04.02	loopback:04.03	loopback:04.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996848	996829	996841	996913
Valid Frames Received	996830	996849	996914	996842
Bytes Sent	790308166	789785622	790091468	790588346
Bytes Received	789080736	789590824	789882809	789394902
Fragments	120890	120743	119472	119230
Collisions	120890	120743	119472	119230
Collision Frames	43588	43461	42752	43288
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port17~20

Name	loopback:05.01	loopback:05.02	loopback:05.03	loopback:05.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996854	996948	996863	996910
Valid Frames Received	996949	996855	996911	996864
Bytes Sent	790724805	791036650	789744082	791301659
Bytes Received	790156252	789872709	790434855	788885411
Fragments	118963	118423	118942	119162
Collisions	118963	118423	118942	119162
Collision Frames	42153	43437	42614	43240
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Port21~24

Name	loopback:06.01	loopback:06.02	loopback:06.03	loopback:06.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Half	Half	Half	Half
Frames Sent	996979	996863	996874	996876
Valid Frames Received	996864	996980	996877	996875
Bytes Sent	791094665	790048964	790419665	790158569
Bytes Received	789201544	790218578	789367488	789461265
Fragments	118644	118733	120321	119393
Collisions	118644	118733	120321	119393
Collision Frames	43508	42484	44064	42647
Oversize and CRC Errors	N/A	N/A	N/A	N/A

Results: 1000Mbps

Port1~4

	Events	Events	Events	Events
	Port 1A-01 LAN-3300A	Port 1A-02 LAN-3300A	Port 1B-01 LAN-3300A	Port 1B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,662,592,852	6,663,203,504	6,665,495,271	6,666,083,816
Rx Bytes	6,663,203,568	6,662,592,916	6,666,083,880	6,665,495,335
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port5~8

	Events	Events	Events	Events
	Port 2A-01 LAN-3300A	Port 2A-02 LAN-3300A	Port 2B-01 LAN-3300A	Port 2B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,663,877,604	6,663,795,483	6,666,492,920	6,666,051,928
Rx Bytes	6,663,795,547	6,663,877,668	6,666,051,992	6,666,492,984
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port9~12

	Events	Events	Events	Events
	Port 3A-01 LAN-3300A	Port 3A-02 LAN-3300A	Port 3B-01 LAN-3300A	Port 3B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,664,840,412	6,665,213,374	6,665,122,683	6,661,760,975
Rx Bytes	6,665,213,438	6,664,840,476	6,661,761,039	6,665,122,747
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port13~16

	Events	Events	Events	Events
	Port 4A-01 LAN-3300A	Port 4A-02 LAN-3300A	Port 4B-01 LAN-3300A	Port 4B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,664,092,081	6,665,249,480	6,663,358,046	6,666,075,556
Rx Bytes	6,665,249,544	6,664,092,145	6,666,075,620	6,663,358,110
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port17~20

	Events	Events	Events	Events
	Port 5A-01 LAN-3300A	Port 5A-02 LAN-3300A	Port 5B-01 LAN-3300A	Port 5B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,667,841,606	6,666,006,779	6,666,601,811	6,664,047,334
Rx Bytes	6,666,006,843	6,667,841,670	6,664,047,398	6,666,601,875
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

Port21~24

	Events	Events	Events	Events
	Port 6A-01 LAN-3300A	Port 6A-02 LAN-3300A	Port 6B-01 LAN-3300A	Port 6B-02 LAN-3300A
Tx Frames	10,000,000	10,000,000	10,000,000	10,000,000
Rx Frames	10,000,001	10,000,001	10,000,001	10,000,001
Tx Bytes	6,666,163,479	6,665,630,819	6,663,862,527	6,665,060,088
Rx Bytes	6,665,630,883	6,666,163,543	6,665,060,152	6,663,862,591
Tx Triggers	0	0	0	0
Rx Triggers	10,000,000	10,000,000	10,000,000	10,000,000
CRC Errors	0	0	0	0
OverSize	0	0	0	0
Frag/UnderSize	0	0	0	0

9. Flow Control Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
IXIA	1pcs	IXIA1600
UTP CAT5e Cable	24pcs	100m

Network Configuration: IXIA / IxExplorer.

Purpose: Make sure the DUT when flow congestion, DUT own Flow control capability.

Procedure:

1. Using IXIA to transmit on each port sequentially.
2. Record the IXIA Counter contents for all ports.

Test explains:

1. Set port2~24 destination to Port1.
2. Port2~24 send 1,000,000 frame to Port1.
3. The Port1 total receiver frame will over Port1 capacity, and congestion.
4. The each source port will receiver Flow Control Frames

Results Table:

Port 1~4

Name	loopback:01.01	loopback:01.02	loopback:01.03	loopback:01.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	0	1000000	1000000	1000000
Valid Frames Received	23000010	268570	268641	268590
Bytes Sent	0	64000000	64000000	64000000
Bytes Received	1472000640	17188480	17193024	17189760
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	0	268560	268631	268580

Port 5~8

Name	loopback:02.01	loopback:02.02	loopback:02.03	loopback:02.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	1000000	1000000	1000000	1000000
Valid Frames Received	268745	268650	268607	268727
Bytes Sent	64000000	64000000	64000000	64000000
Bytes Received	17199680	17193600	17190848	17198528
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	268735	268640	268597	268717

Port 9~12

Name	loopback:03.01	loopback:03.02	loopback:03.03	loopback:03.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	1000000	1000000	1000000	1000000
Valid Frames Received	268647	268646	268760	268689
Bytes Sent	64000000	64000000	64000000	64000000
Bytes Received	17193408	17193344	17200640	17196096
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	268637	268636	268750	268679

Port 13~16

Name	loopback:04.01	loopback:04.02	loopback:04.03	loopback:04.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	1000000	1000000	1000000	1000000
Valid Frames Received	268742	268683	268740	268576
Bytes Sent	64000000	64000000	64000000	64000000
Bytes Received	17199488	17195712	17199360	17188864
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	268732	268673	268730	268566

Port 17~20

Name	loopback:05.01	loopback:05.02	loopback:05.03	loopback:05.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	1000000	1000000	1000000	1000000
Valid Frames Received	268557	268814	268744	268675
Bytes Sent	64000000	64000000	64000000	64000000
Bytes Received	17187648	17204096	17199616	17195200
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	268547	268804	268734	268665

Name	loopback:06.01	loopback:06.02	loopback:06.03	loopback:06.04
Link State	Link Up	Link Up	Link Up	Link Up
Line Speed	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Duplex Mode	Full	Full	Full	Full
Frames Sent	1000000	1000000	1000000	1000000
Valid Frames Received	268696	268588	268763	268667
Bytes Sent	64000000	64000000	64000000	64000000
Bytes Received	17196544	17189632	17200832	17194688
Undersize	0	0	0	0
Oversize	0	0	0	0
CRC Errors	0	0	0	0
Flow Control Frames	268686	268578	268753	268657



10. Compatibility Test

Equipment :

Equipment	Quantity	Remark
DUT	1pcs	PMH-EW24V
IXIA	1pcs	IXIA1600
Managed Switch	1pcs	EW-7242IW
Dumb Switch	1pcs	EW-4082I
Media Converter	1pcs	EC-212R
UTP CAT5e Cable	2pcs	2m

Network Configuration: IXIA / IxExplorer.

Purpose: Make sure the DUT can compatible Managed Switch, Dumb Switch and Media Converter.

Procedure:

1. Using IXIA to transmit on link port.
2. Record the IXIA Counter contents.

Results Table:

Type	Switch	PD Switch	Web Smart Switch
Model	EW-7242IW	EW-4082I	EC-212R
PS-7082IL	PASS	PASS	PASS

Results: PMH-EW24V Link EW-7242IW

Name	loopback:07.01	loopback:07.02
Link State	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps
Duplex Mode	Full	Full
Frames Sent	10000000	10000000
Valid Frames Received	10000000	10000000
Bytes Sent	7900441541	7901853093
Bytes Received	7901853093	7900441541
Undersize	0	0
Oversize	0	0
CRC Errors	0	0
Flow Control Frames	0	0

**Results: PMH-EW24V Link EW-4082I**

Name	loopback:07.01	loopback:07.02
Link State	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps
Duplex Mode	Full	Full
Frames Sent	10000000	10000000
Valid Frames Received	10000000	10000000
Bytes Sent	7899831392	7901269724
Bytes Received	7901269724	7899831392
Undersize	0	0
Oversize	0	0
CRC Errors	0	0
Flow Control Frames	0	0

Results: PMH-EW24V Link EC-212R

Name	loopback:07.01	loopback:07.02
Link State	Link Up	Link Up
Line Speed	1000 Mbps	1000 Mbps
Duplex Mode	Full	Full
Frames Sent	10000000	10000000
Valid Frames Received	10000000	10000000
Bytes Sent	7900286570	7899497067
Bytes Received	7899497067	7900286570
Undersize	0	0
Oversize	0	0
CRC Errors	0	0
Flow Control Frames	0	0