



National Enhance Technology Corp.

Test Report

Model Number : NV-600L+NV-600A

Product Name : VDSL2 CO/CPE Router

Test Type : Performance Test Table

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◆ **Test Environments:**

Test Items	Descriptions
VDSL2 CO Router x 1	NV-600L
VDSL2 CPE Router x 1	NV-600A (Firmware Ver:C.4.1)
Operation System	Windows XP
Ethernet Cable	Cat 5e. UTP RJ-45 8P8C Ethernet Cable
Loop Simulator	Simulator Card (24AWG)
Room temperature	25 degree C

◆ **Test conditions:**

Test Items	Descriptions
Noise injection	None
Tone mode	V43 (Default Value)
Max Interleave Delay	1 (Default Value)
Target SNRM	6 dB (Default Value)

◆ **Test Procedure:**

1. NV-600L connects to NV-600A CPE Device.
2. Access the web management, then setting the band profile and band plan.
3. On the channel configure page, it will show the US(Upstream) and DS(Downstream) information.
4. Gather the test data at interval of every 200 meter size as steps until the link can not be established.
5. Test the band profile and band plan from the profile setting table via web user interface.

◆ Compatibility Table:

The following shows the band profile and band plan compatibility:

Band Profile List		Band Plan List	
A0	VDSL2 Profile8a	B0	Annex A M1_EU32
A1	VDSL2 Profile8b	B1	Annex A M9_EU64
A2	VDSL2 Profile8c	B2	Annex B 997-M2x-A (B05)
A3	VDSL2 Profile8d	B3	Annex B 997-M2x-M (B06)
A4	VDSL2 Profile12a	B4	Annex B 997-M1c-A-7 (B07)
A5	VDSL2 Profile12b	B5	Annex B 998-M1x-B (B08)
A6	VDSL2 Profile17a	B6	Annex B 998-M2x-A (B10)
A7	VDSL2 Profile30a	B7	Annex B 998-M2x-M (B11)
A8	VDSL2 Profile17b	B8	Annex B 998-M2x-B (B12)
		B9	Annex B 998-M2x-NUS0 (B13)
		B10	Annex C
		B11	Annex C_8K
		B12	Annex B 997-M2x-NUS0
		B13	Annex C 1M1
		B14	Annex C_8K 1M1
		B15	Annex B 998E17-M2x-A
		B16	Annex B 998E17-M2x-NUS0

NV-600L with NV-600A Compatibility table:

The following table shows the band profile and band plan compatibility.

Band Plan Band Profile	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
A0 (8a)	X	X	O	O	X	O	X	X	X	X	X	X	X	X	X	X	X
A1 (8b)	X	X	O	O	X	O	X	X	X	X	X	X	X	X	X	X	X
A2 (8c)	X	X	O	X	O	X	X	X	X	X	X	X	X	X	X	X	X
A3 (8d)	O	O	O	X	O	O	O	O	O	X	X	X	X	X	X	X	X
A4 (12a)	O	O	X	X	O	O	O	O	O	X	X	X	X	X	X	X	X
A5 (12b)	O	O	X	X	O	O	O	O	O	O	X	X	X	X	X	X	X
A6 (17a)	O	X	X	X	O	O	O	O	O	X	O	X	X	O	X	X	X
A7 (30a)	O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
A8 (17b)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Note: O = Compatible; X = Not Compatible

◆ NV-600L with NV-600A Performance table

■ NV-600L with NV-600A series (Profile : 8a)

Annex B 997 M2x-A (B05)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	23.2	58.3
200	22.7	58.0
300	24.8	57.2
400	21.8	55.5
600	22.3	53.9
800	12.0	46.7
1000	10.1	39.2
1200	5.2	33.3
1400	2.3	29.3
1600	0.1	25.7

Annex B 997 M2x-M (B06)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	27.4	58.0
200	26.3	57.5
300	25.9	56.7
400	25.0	54.9
600	23.1	52.9
800	15.2	46.2
1000	11.2	38.5
1200	5.1	32.6
1400	2.9	27.8
1600	0.7	23.4

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	8.4	81.7
200	8.1	80.3
300	8.1	78.2
400	7.6	74.8
600	7.2	70.9
800	6.8	58.5
1000	5.3	47.5
1200	1.8	38.2
1400	0.8	27.9
1600	0.6	24.6

Notes:

- ◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
- ◆ The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ **NV-600L with NV-600A series (Profile : 8b)**

Annex B 997 M2x-A (B05)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	20.4	56.9
200	23.6	56.4
300	19.7	55.4
400	18.6	53.0
600	15.7	49.9
800	14.1	43.0
1000	6.0	38.5
1200	4.9	29.6
1400	1.1	26.3

Annex B 997 M2x-M (B06)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	26.3	56.1
200	25.4	55.9
300	25.1	55.1
400	24.2	52.8
600	20.8	49.3
800	14.1	43.0
1000	8.5	37.4
1200	4.9	29.4
1400	1.8	26.7
1600	0.5	22.6

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	8.7	80.9
200	8.3	79.8
300	8.1	78.5
400	7.9	75.1
600	7.6	67.3
800	6.2	54.8
1000	4.4	44.7
1200	1.7	34.9
1400	0.8	27.4
1600	0.4	19.6

Notes:

- ◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
- ◆ The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 8C)

Annex B 997 M2x-A (B05)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	13.8	59.2
200	13.2	59.1
300	13.9	59.3
400	13.0	57.8
600	12.7	54.4
800	11.7	49.0
1000	10.7	40.7
1200	7.6	29.7
1400	4.5	25.1
1600	2.0	21.9

Annex B 997 M1c-A-7 (B07)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	8.2	86.5
200	8.2	85.2
300	8.4	83.3
400	8.4	80.1
600	7.7	72.7
800	7.5	60.4
1000	6	48.2
1200	3.1	37.2
1400	0.8	31.1
1600	0.1	23.6

Notes:

- ◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
- ◆ The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 8D)

Annex B 997 M2x-A (B05)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	25.5	59.2
200	27.2	59.1
300	24.1	58.3
400	24.4	56.7
600	20.3	53.2
800	16.1	47.4
1000	7.8	39.8
1200	5.8	30.5
1400	3.1	28.2
1600	0.7	23.1

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	8.9	83.7
200	8.7	82.5
300	8.5	80.5
400	8.5	77.6
600	8.1	70.2
800	7.6	60.1
1000	5.6	48.4
1200	2.8	37.6

Annex B 998 M2x-B (B12)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	8.6	85.3
200	8.5	84.8
300	8.2	82.8
400	7.8	80.4
600	7.3	74.3
800	6.9	64.9
1000	6.5	51.3
1200	3.8	38.1

Notes:

◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
 The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 12A)

Annex A M1_EU32		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.3	88.2
200	31.6	86.1
300	30.0	85.1
400	28.0	82.0
600	25.4	66.1
800	14.8	48.5
1000	6.0	46.0
1200	3.9	32.6
1400	0.9	29.7
1600	0.1	26.4

Annex B 997 M1c-A-7 (B07)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	35.6	86.50
200	30.5	83.0
300	30.2	80.1
400	32.1	76.9
600	22.7	66.5
800	11.9	51.5
1000	4.5	47.1
1200	2.4	36.5

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	37.6	84.8
200	33.8	82.5
300	33.0	79.9
400	32.9	75.5
600	25.6	66.0
800	13.0	51.1
1000	5.4	46.6
1200	2.7	35.2

Annex B 998 M2x-A (B10)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.7	87
200	32.3	84.2
300	30.9	82.9
400	29.4	79.5
600	22.3	69.8
800	10.2	56.5
1000	5.7	51.2
1200	3.3	35.9

Annex B 998 M2x-M (B11)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	35.6	85.7
200	33.6	84.0
300	31.8	82.2
400	30.2	79.6
600	24.6	70.1
800	12.6	53.5
1000	6.3	48.9
1200	3.9	33.6

Annex B 998 M2x-B (B12)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	35.4	86.6
200	33.3	84.3
300	31.9	82.2
400	30.6	79.6
600	24.2	70.1
800	12.7	53.6
1000	6.2	48.9
1200	3.9	33.7

Notes:

◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
 The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 12B)

Annex A M1_EU32		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	33.8	88.8
200	31.4	86.2
300	30.2	85.1
400	29.1	80.3
600	25.6	70.3
800	13.9	50.3
1000	7.0	44.8
1200	4.0	33.4
1400	1.8	27.1

Annex A M9_EU64		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.0	87.8
200	32.0	86.0
300	30.9	84.0
400	28.9	81.9
600	29.2	65.6
800	14.1	50.9
1000	7.4	43.2
1200	4.0	33.8
1400	1.8	27.1

Annex B 997 M1c-A-7 (B07)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	35.0	85.8
200	32.7	82.9
300	30.4	81.1
400	31.9	77.2
600	23.6	66.4
800	11.2	52.8
1000	4.9	47.0
1200	2.1	38.1

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.9	85.1
200	32.5	82.3
300	31.9	80.3
400	31.6	76.1
600	25.0	64.4
800	11.2	53.5
1000	6.2	49.2
1200	2.1	37.1

Annex B 998 M2x-A (B10)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	33.4	86.9
200	31.9	84.7
300	30.6	82.6
400	28.9	79.7
600	25.5	70.8
800	11.2	56.7
1000	6.3	48.5
1200	3.1	36.2
1400	0.9	31.5

Annex B 998 M2x-M (B11)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.2	86.4
200	32.0	84.1
300	30.9	82.3
400	29.2	79.7
600	25.2	70.2
800	10.0	57.0
1000	6.3	50.9
1200	2.9	36.2

■ NV-600L with NV-600A series (Profile : 12B)

Annex B 998 M2x-B (B12)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.1	86.2
200	32.5	84.6
300	31.3	82.3
400	28.9	79.4
600	25.2	70.2
800	10.4	57.0
1000	6.3	48.6
1200	2.9	38.3

Annex B 998-M2x-NUS0(B13)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	34.3	87.4
200	31.9	84.6
300	30.4	82.4
400	29.2	79.7
600	24.9	70.8
800	11.0	56.8
1000	6.2	48.5
1200	2.9	37.5

Notes:

◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
 The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 17A)

Annex A M1_EU32		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	30.2	100
200	29.2	100
300	29.0	100
400	27.3	100
600	23.6	77.0
800	14.2	48.5
1000	5.8	46.3
1200	4.4	29.0
1300	2.5	27.3

Annex B 997 M1c-A-7 (B07)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	30.4	100
200	28.0	100
300	27.9	100
400	27.8	100
600	19.9	82.9
800	9.7	55.6
1000	4.8	48.2
1200	1.8	35.8

Annex B 998 M1x-B (B08)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	31.1	100
200	30.1	100
300	29.5	100
400	27.7	100
600	22.1	81.0
800	10.1	55.1
1000	5.0	46.0
1200	1.3	37.1

Annex B 998 M2x-A (B10)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	30.0	100
200	29.0	100
300	28.5	100
400	27.0	100
600	22.1	85.5
800	9.5	59.3
1000	6.3	47.5
1200	2.9	38.3

Annex B 998 M2x-M (B11)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	30.4	100
200	29.0	100
300	27.1	100
400	26.5	100
600	22.1	83.0
800	10.2	54.9
1000	5.9	46.1
1200	3.1	35.1
1300	1.1	34.1

Annex B 998 M2x-B (B12)		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	30.4	100
200	29.0	100
300	27.6	100
400	27.1	100
600	20.5	83.9
800	10.2	55.3
1000	6.1	46.1
1200	3.1	34.5

Annex C		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	32.8	100
200	31.3	100
300	30.8	100
400	30.6	100
600	22.1	76.3
800	11.6	46.0
1000	6.1	38.0
1200	2.2	31.2

Annex C 1M1		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	31.7	100
200	30.0	100
300	29.1	100
400	28.9	100
600	21.9	73.4
800	11.9	40.6
1000	6.1	36.0
1200	2.6	25.3

Notes:

◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
 The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.

■ NV-600L with NV-600A series (Profile : 30A)

Annex A M1_EU32		
Cable Length (meters)	US [Mbps]	DS [Mbps]
100	78.9	100
200	66.3	100
300	49.4	100
400	36.0	100
600	22.1	66.7
800	16.8	43.5
1000	6.5	42.1
1200	4.9	25.6

Notes:

◆ DS: Downstream; US: Upstream. Actual Data Rate Unit: Mbps
 The performance data above is for reference only, the actual data rate will vary depending on the quality of the copper wire and environment factors.