



PASOLINK NEO (Standard Version)

NEC Corporation

CONTENTS

- 1. Equipment Menu**
- 2. NEO Standard**
 - *Main Features*
 - *System Parameter*
 - *Basic Equipment Configuration*
 - *IDU Menu*
 - *System Upgrade Image*
 - *E1&LAN setting*
 - *E1 setting*
 - *Interface Card Summary*
 - *STD 2-way*
- 3. Network Management System**

1. Equipment Menu

Equipment Menu (1)

Interface (NEO)

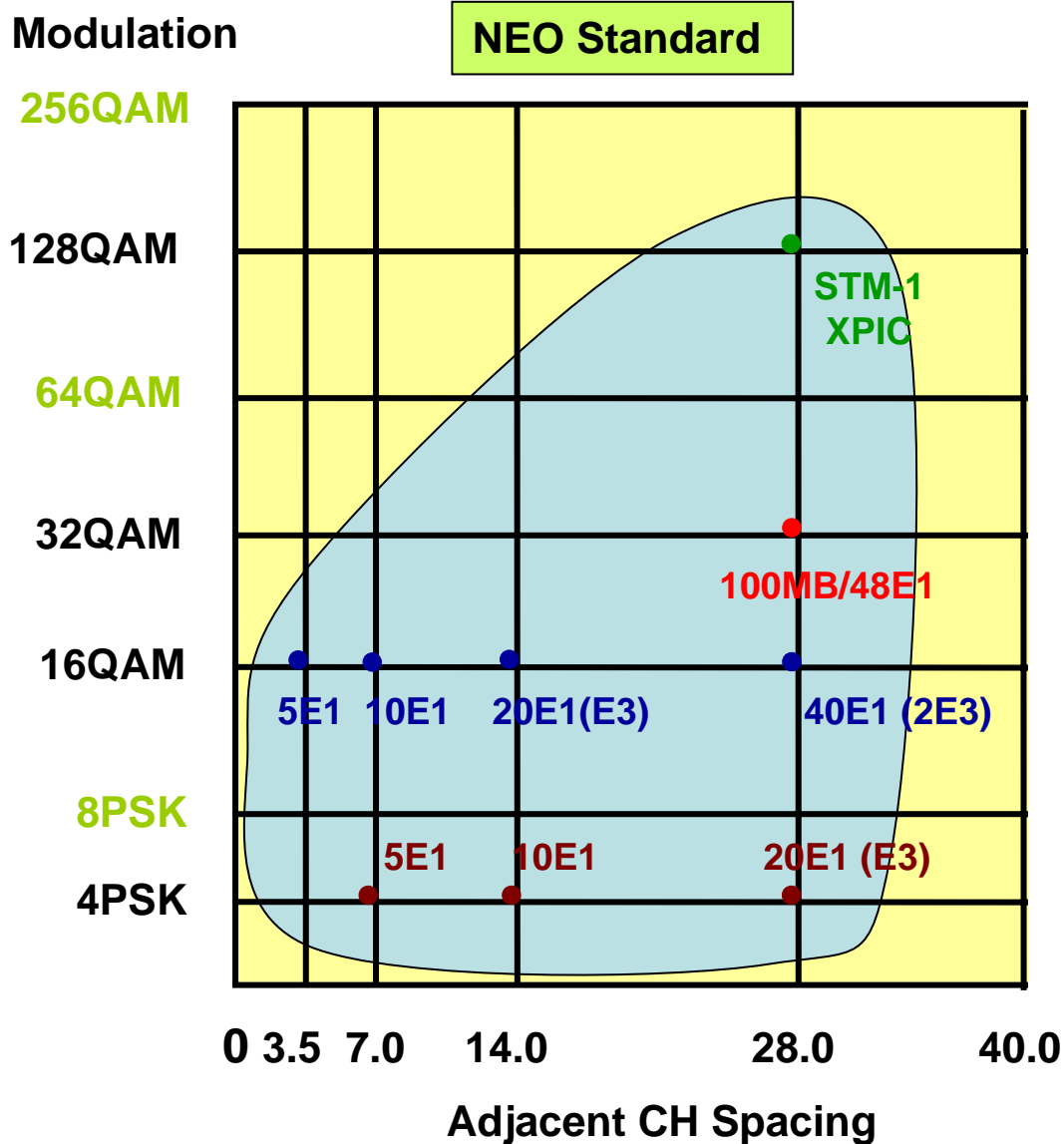
Full Menu Coverage

- PDH : 5/10/20E1, 4PSK
5/10/20/40E1, 16QAM
48E1, 32QAM
1/2E3, 4PSK/16QAM
- SDH : STM-1, 128QAM
2xSTM-1, 128QAM/XPIC
- Ethernet : 10M/20M/40Mbps, 4PSK
10M/20M/40M/80Mbps, 16QAM
100Mbps, 32QAM
150Mbps, 128QAM

RF Frequency

NEO : L6/U6/7/8/10.5/11/13/15/18/23/26/28/32/38/52G

Equipment Menu (2)



2. NEO Standard

Main Features

– **Common platform design (PDH, SDH, and LAN)**

→ V4 & Mx & PASO+(PDH) & PASO+(SDH) >> NEO (Same Equipment)

– **Bitrate Free (PDH to SDH)**

→ 10MB/ 20MB/ 40MB/ 80MB/ 100MB/ STM-1 (Same MODEM Unit)

– **Modulation Free (PDH to SDH)**

→ 4PSK(10-40MB)/ 16QAM(10-80MB)/ 32QAM(100MB)/ 128QAM(155MB)

– **Compact size/ Low power**

→ 1+0/1+1 @ 1U without FAN

– **Various Application**

→ (E1+LAN), (E3+E1+LAN), (4PLAN + E1), (STM-1), APS for STM-1(opt), XPIC etc. ...,

– **Bandwidth and Modulation Free ODU**

→ Coverage from 5E1 to 2xSTM-1 or from 10M to 2x155Mbps.

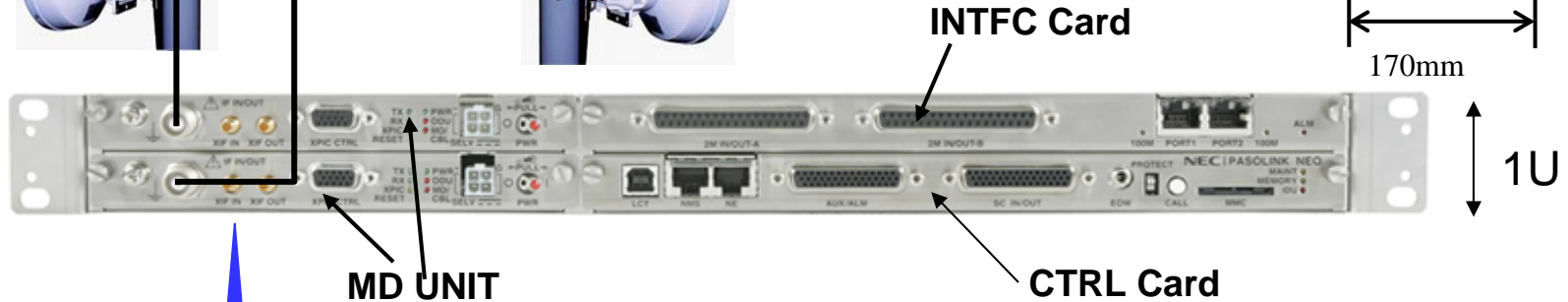
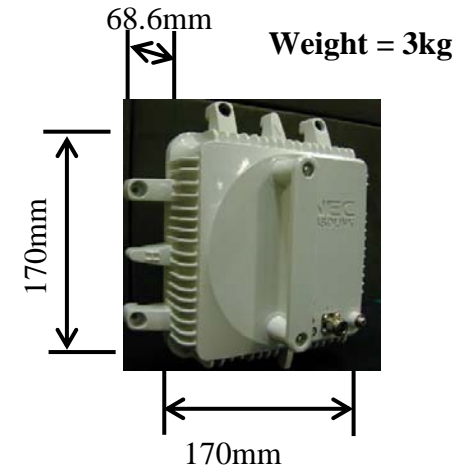
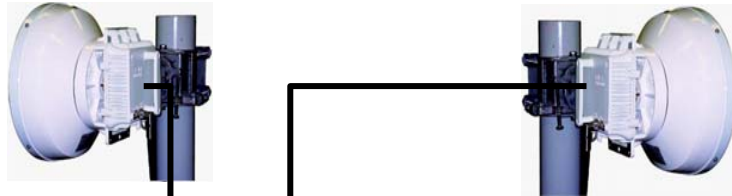
System Parameter

Frequency band	6-8GHz	10-11GHz	13GHz	15GHz	18GHz	23GHz	26GHz	28GHz	32GHz	38GHz	52GHz
Range(GHz)	5.925-8.5	10.15-11.7	12.75-13.25	14.2-15.35	17.7-19.7	21.2-23.6	24.25-27.0	27.5-29.5	31.8-33.4	37.0-40.0	51.4-52.6
Tx power(dBm)											
128QAM	25	21	21	21	19	19	18	18	17	14.5	-
32QAM											
16QAM	26	21.5	22.5	22.5	22	22	20	18	17	14.5	
4PSK	29	25	25	23	24	24	22	22	22	18	3
Receiver threshold(dBm) at 10-6 BER											
156M/128Q	-69.5	-68.5	-68.5	-69.0	-69.0	-69.0	-68.5	-68.5	-67.0	-67.0	-
100M/32Q	-75.5	-74.5	-74.5	-75.0	-75.0	-75.0	-74.5	-74.5	-73.0	-73.0	-
80M/16Q	-77.0	-76.0	-76.0	-76.5	-76.5	-76.5	-76.0	-76.0	-74.5	-74.5	-
40M/16Q	-80.0	-79.0	-79.0	-79.5	-79.5	-79.5	-79.0	-79.0	-77.5	-77.5	-
20M/16Q	-83.0	-82.0	-82.0	-82.5	-82.5	-82.5	-82.0	-82.0	-80.5	-80.5	-
10M/16Q	-86.0	-85.0	-85.0	-85.5	-85.5	-85.5	-85.0	-85.0	-83.5	-83.5	-
40M/4PSK	-84.0	-83.0	-83.0	-83.5	-83.5	-83.5	-83.0	-83.0	-81.5	-81.5	-78.0
20M/4PSK	-87.0	-86.0	-86.0	-86.5	-86.5	-86.5	-86.0	-86.0	-84.5	-84.5	-81.0
10M/4PSK	-90.0	-89.0	-89.0	-89.5	-89.5	-89.5	-89.0	-89.0	-87.5	-87.5	-84.0
System Gain(dB) at 10-6 BER											
156M/128Q	94.5	89.5	89.5	90.0	88.0	88.0	86.5	86.5	84.0	81.5	-
100M/32Q	100.5	95.5	95.5	96.0	94.0	94.0	92.5	92.5	90.0	87.5	-
80M/16Q	103.0	97.5	98.5	99.0	98.5	98.5	96.0	94.0	91.5	89.0	-
40M/16Q	106.0	100.5	101.5	102.0	101.5	101.5	99.0	97.0	94.5	92.0	-
20M/16Q	109.0	103.5	104.5	105.0	104.5	104.5	102.0	100.0	97.5	95.0	-
10M/16Q	112.0	106.5	107.5	108.0	107.5	107.5	105.0	103.0	100.5	98.0	-
40M/4PSK	113.0	108.0	108.0	106.5	107.5	107.5	105.0	105.0	103.5	99.5	81.0
20M/4PSK	116.0	111.0	111.0	109.5	110.5	110.5	108.0	108.0	106.5	102.5	84.0
10M/4PSK	119.0	114.0	114.0	112.5	113.5	113.5	111.0	111.0	109.5	105.5	87.0

Basic Equipment Configuration

ODU

Bitrate Free: 5E1-48E1, STM-1/2xSTM-1
Modulation Free: 4PSK, 16/32/128QAM



482x44x240mm, 4kg

IDU

- 1+0 / 1+1 @ 1U
- Flexible interface (PDH, SDH, LAN)
- Bitrate free (5E1 – STM-1)
- Modulation free (4PSK, 16/32/128QAM)






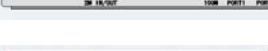








IDU Menu (Interface Card Menu)

Interface Card

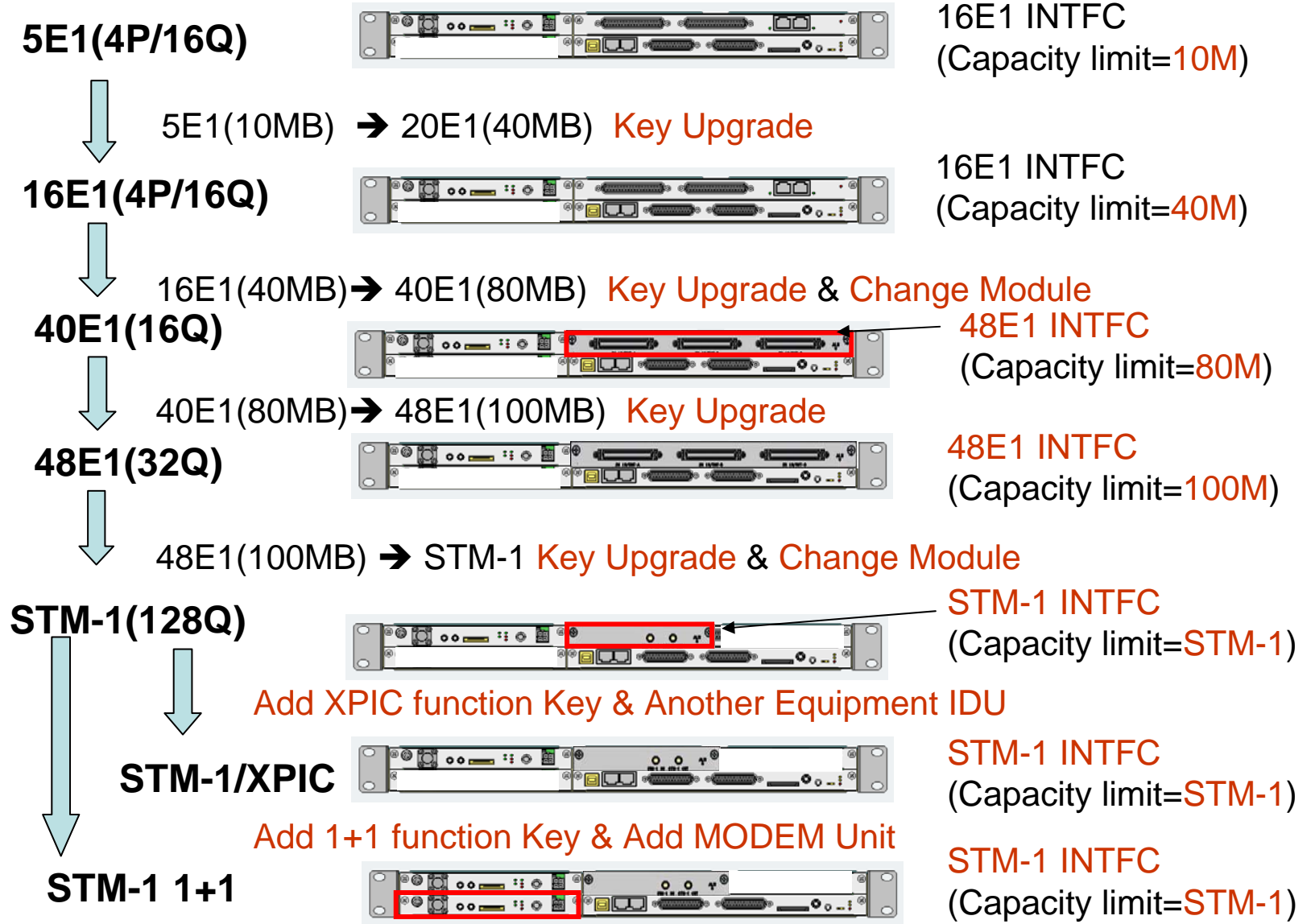
NEO IDU



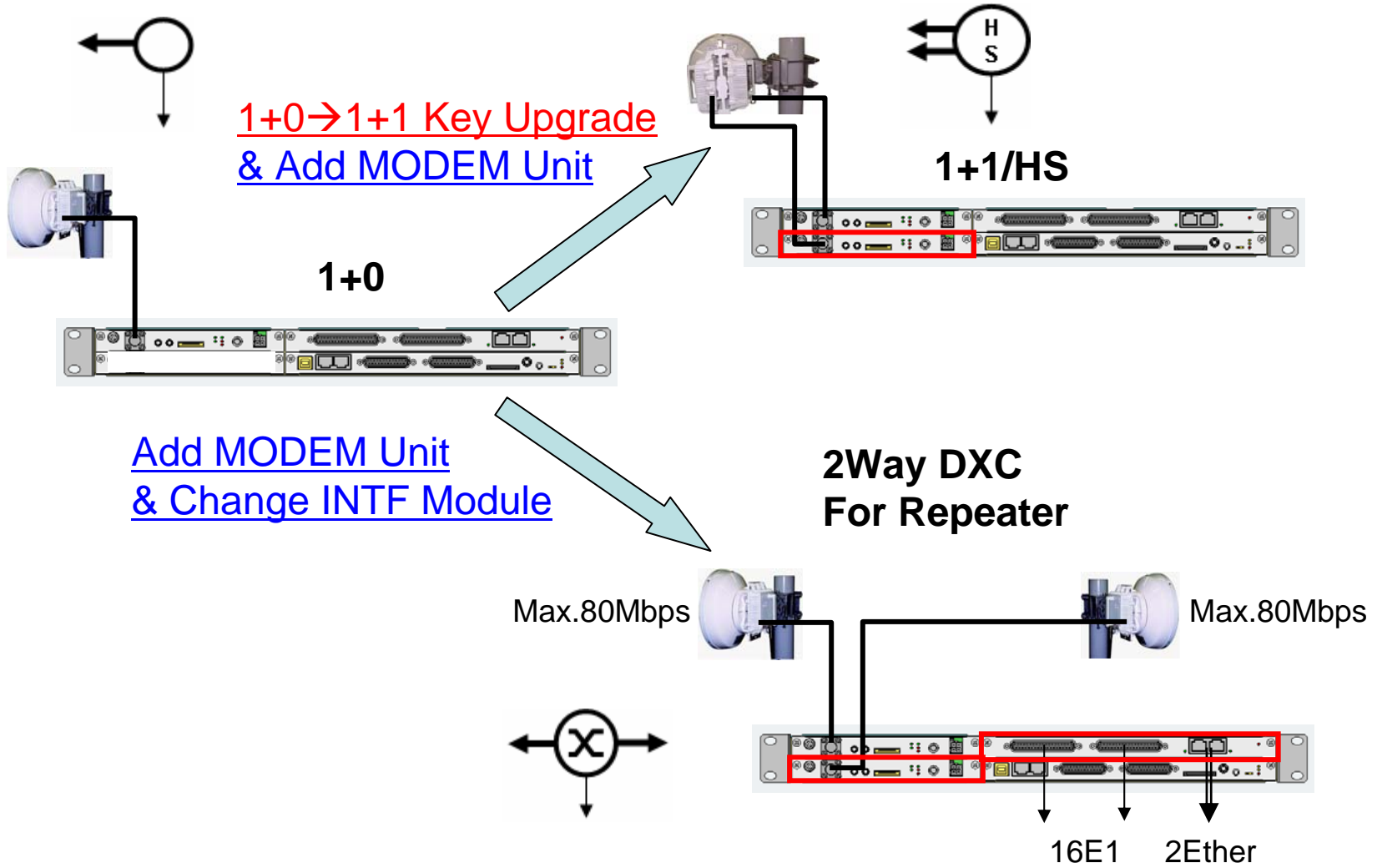
● Released

-  16E1 INTFC e/w 2P LAN
-  32E1 INTFC e/w 2P LAN
-  E3 INTFC
-  48E1 INTFC
-  4P LAN INTFC
-  STM-1 Opt
-  STM-1 ELE
-  LAN/WS INTFC
(for 2P LAN over 150M)
-  LAN/WS INTFC
-  WS INTFC
-  GbE INTFC over 150M
-  16E1 INTFC e/w 2P LAN & 2way DXC
-  4P LAN INTFC-E for VLAN & QoS
-  GbE INTFC-E for VLAN & QoS

System Upgrade Image



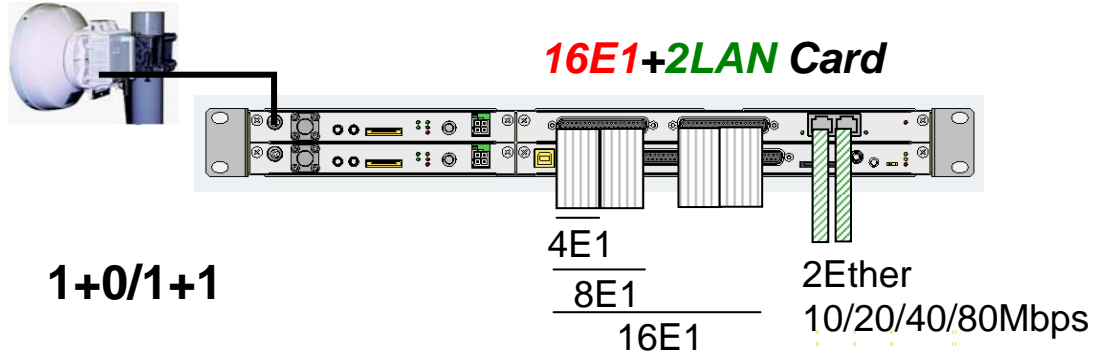
System Upgrade Image



E1 & LAN Setting (Ex. 16E1+2LAN Card)

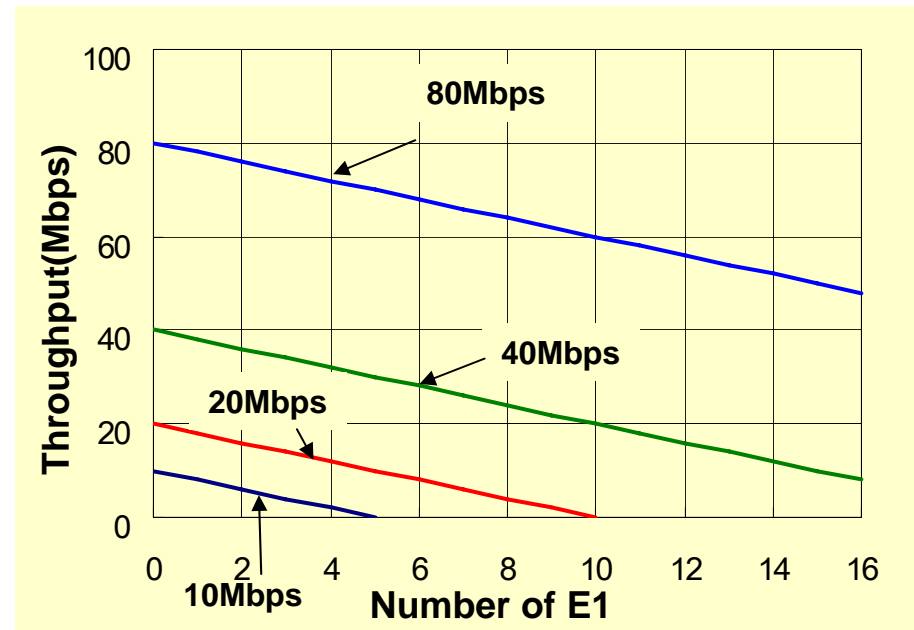
Air Capacity

- 10Mbps(5E1), 4P/16Q
- 20Mbps(10E1), 4P/16Q
- 40Mbps(20E1), 4P/16Q
- 80Mbps(40E1), 16Q

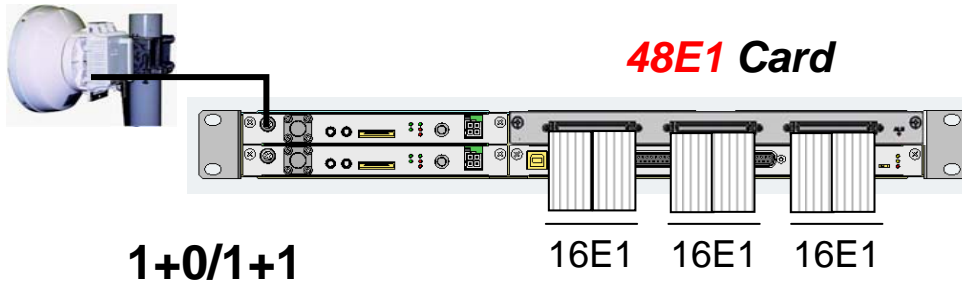


System	Mod.	E1	2PLAN (Mbps)
10Mbps	4P/16Q	0-5	10-0
20Mbps	4P/16Q	0-10	20-0
40Mbps	4P/16Q	0-16	40-8
80Mbps	16Q	0-16	80-48

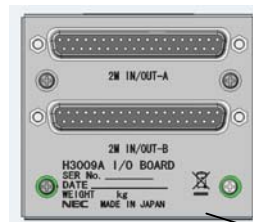
The above specification is for "LAN shared mode."



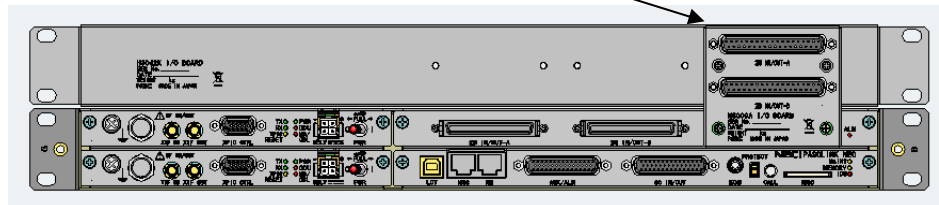
E1 Setting (Ex. **48E1** Card)



System	Capacity, Modulation
1	5E1, 4PSK/16QAM
2	10E1, 4PSK/16QAM
3	20E1, 4PSK/16QAM
4	40E1, 16QAM
5	48E1, 32QAM



MDR(16E1) → D-Sub(2x8E1)
Conversion Card (option)



Interface Card Summary (1)

PDH E1

Interface Card	E1	LAN	Total Capacity
16E1 INTFC	D-sub37 x2	RJ-45x2	10-80MB
32E1 INTFC	MDR68 x2	RJ-45x2	10-100MB
48E1 INTFC	MDR68 x3	N/A	10-100MB
4P LAN INTFC	D-sub37 x1	RJ-45x4	10-100MB
2way DXC INTFC	D-sub37 x2	RJ-45x2	10-80MB

PDH E3

Interface Card	E3	WS-E1	WS/SC-LAN	Total Capacity
E3 INTFC	IEC-min (2-port)	D-sub37 x1	RJ-45 x2	40MB(1xE3 & 4xE1) 80MB(2xE3 & 8xE1)*

**Capacity Software Key is necessary to Upgrade from 1xE3 to 2xE3.*

Interface Card Summary (2)

SDH STM-1

Interface Card		MAIN	WS(E1)	Capacity
STM-1 INTFC (ELE)		IEC-min	N/A	STM-1
STM-1 INTFC (OPT)		LC	N/A	STM-1
GbE INTFC		LC/RJ-45	N/A	150MB
LAN/WS INTFC *	Main slot	RJ-45 x2	N/A	100MB+50MB 75MB+75MB Best Effort + Best Effort
	Sub slot	N/A	RJ-45 x2 D-sub9	64-256KB(SC)/2M(WS) for SC-LAN E1 for WS

**Functions are different by a type*

A-type: E1 for WS/SC-LAN (Sub Only) =>Not recommend (Including Type C)

B-type: E1 for WS (Sub Only)

C-type: Main LAN (Main Use) or E1 for WS/SC-LAN (Sub Use)