

# NPort® 6000 Terminal Servers



	NPort® 6150	NPort® 6250	NPort® 6250-M-SC	NPort® 6250-S-SC	NPort® 6450	NPort® 6610-8	NPort® 6610-8-48V	NPort® 6610-16	NPort® 6610-16-48V
<b>LAN Interface</b>									
10/100BaseT(X) Ports	1 port (8-pin RJ45 connector)								
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
100BaseFX Ports	---	---	1 (multi-mode)	1 (single-mode)	---	---	---	---	---
<b>Expansion Modules</b>									
10/100BaseT(X) (RJ45)	---	---	---	---	√	√	√	√	√
Multi-mode Fiber (SC)	---	---	---	---	√	√	√	√	√
Single-mode Fiber (SC)	---	---	---	---	√	√	√	√	√
GSM/GPRS	---	---	---	---	√	√	√	√	√
Modem	---	---	---	---	√	√	√	√	√
<b>Serial Interface</b>									
RS-232 Ports	---	---	---	---	---	8	8	16	16
RS-232/422/485 Ports	1	2	2	2	4	---	---	---	---
Connectors	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45
Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark								
Flow Control	RTS/CTS, DTR/DSR, XON/XOFF								
Baudrate	50 bps to 921.6 Kbps (supports non-standard baudrates)								
15 KV ESD Protection	√	√	√	√	√	√	√	√	√
2 KV isolation protection	---	---	---	---	---	---	---	---	---
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
RS-232 Console Port	√	√	√	√	√	√	√	√	√
<b>Advanced Features</b>									
LCD Panel with 4 push buttons	---	---	---	---	√	√	√	√	√
Serial Data Log	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
Offline Port Buffering	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
SD Slot	---	√	√	√	√	√	√	√	√
<b>Software</b>									
Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1/V2c/v3, DDNS, HTTP, SMTP, HTTPS, SSL, SSH, PPPoE, RFC2217, IPv6, IPv4, Turbo Ring, Turbo Ring 2								
Security Protocols	DES, 3DES, AES, SSH, SSL, HTTPS, RADIUS, PAP, CHAP, TACACS+								
Configuration Options	Web Console, Telnet Console, Serial Console, Windows Search Utility								
Driver Support	Windows Driver Manager (for Windows 95, 98, ME, NT, 2000, XP x86/x64, 2003 x86/x64, Vista x86/x64, 2008 x86/x64, Embedded CE 5.0/6.0, XP Embedded), Linux Real TTY driver (for 2.4.x, 2.6.x), Fixed TTY driver (for SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i)								
Management	SNMP MIB-II								
IP Routing	Static, RIP-I, RIP-II								
Standard Operation Modes	Real COM, TCP Server, TCP Client, UDP, Pair Connection, RFC2217, Terminal, Reverse Telnet, Ethernet Modem, Printer, PPP, Disabled								
Secure Operation Modes	Secure Real COM, Secure TCP Server, Secure TCP Client, Secure Pair Connection, SSH, Reverse SSH								
Terminal Sessions	8 sessions per port								
<b>Physical Characteristics</b>									
Housing	Metal	Metal	Metal	Metal	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)
Weight	700 g	730 g	730 g	730 g	1020 g	3460 g	3460 g	3580 g	3580 g
Dimensions (mm)	67 x 100.4 x 28	77 x 111 x 28	77 x 111 x 28	77 x 111 x 28	158 x 103 x 35	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44
<b>Environmental Limits</b>									
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
<b>Power Requirements</b>									
Input Voltage	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	100 to 240 VAC	±48 VDC	100 to 240 VAC	±48 VDC
Power Consumption	285 mA @ 12 V 150 mA @ 24 V	333 mA @ 12 V 173 mA @ 24 V	428 mA @ 12 V 219 mA @ 24 V	376 mA @ 12 V 193 mA @ 24 V	730 mA @ 12 V 330 mA @ 24 V	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V
<b>Regulatory Approvals</b>									
EMC	CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A								
Safety	UL (UL60950-1), TÜV (EN60950-1)								
EMS	EN61000-4-2 (ESD), Level 3 EN61000-4-4 (EFT), Level 2 EN61000-4-5 (Surge), Level 2					EN61000-4-2 (ESD), Level 3 EN61000-4-4 (EFT), Level 2 EN61000-4-5 (Surge), Level 3			
<b>Reliability</b>									
Buzzer, RTC, WDT	√	√	√	√	√	√	√	√	√
MTBF	231709 hrs	226128 hrs	225762 hrs	225762 hrs	120354 hrs	135891 hrs	135891 hrs	102373 hrs	102373 hrs
Warranty	5 years (see www.moxa.com/warranty)								

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Terminal Servers > Product Selection Guides

# NPort® 6000 Terminal Servers



	NPort® 6610-32	NPort® 6610-32-48V	NPort® 6650-8	NPort® 6650-8-48V	NPort® 6650-16	NPort® 6650-16-48V	NPort® 6650-32	NPort® 6650-32-48V
<b>LAN Interface</b>								
10/100BaseT(X) Ports	1 port (8-pin RJ45 connector)							
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
100BaseFX Ports	---	---	---	---	---	---	---	---
<b>Expansion Modules</b>								
10/100BaseT(X) (RJ45)	√	√	√	√	√	√	√	√
Multi-mode Fiber (SC)	√	√	√	√	√	√	√	√
Single-mode Fiber (SC)	√	√	√	√	√	√	√	√
GSM/GPRS	√	√	√	√	√	√	√	√
Modem	√	√	√	√	√	√	√	√
<b>Serial Interface</b>								
RS-232 Ports	32	32	---	---	---	---	---	---
RS-232/422/485 Ports	---	---	8	8	16	16	32	32
Connectors	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45
Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark							
Flow Control	RTS/CTS, DTR/DSR, XON/XOFF							
Baudrate	50 bps to 921.6 Kbps (supports non-standard baudrates)							
15 KV ESD Protection	√	√	√	√	√	√	√	√
2 KV isolation protection	---	---	---	---	---	---	---	---
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
RS-232 Console Port	√	√	√	√	√	√	√	√
<b>Advanced Features</b>								
LCD Panel with 4 push buttons	√	√	√	√	√	√	√	√
Serial Data Log	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
Offline Port Buffering	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
SD Slot	√	√	√	√	√	√	√	√
<b>Software</b>								
Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, SNMP V1/V2c/v3, DDNS, HTTP, SMTP, HTTPS, SSL, SSH, PPPoE, RFC2217, IPv6, IPv4, Turbo Ring, Turbo Ring 2							
Security Protocols	DES, 3DES, AES, SSH, SSL, HTTPS, RADIUS, PAP, CHAP, TACACS+							
Configuration Options	Web Console, Telnet Console, Serial Console, Windows Search Utility							
Driver Support	Windows Driver Manager (for Windows 95, 98, ME, NT, 2000, XP x86/x64, 2003 x86/x64, Vista x86/x64, 2008 x86/x64, Embedded CE 5.0/6.0, XP Embedded), Linux Real TTY driver (for 2.4.x, 2.6.x), Fixed TTY driver (for SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, VAIx 5.x, HP-UX 11i)							
Management	SNMP MIB-II							
IP Routing	Static, RIP-I, RIP-II							
Standard Operation Modes	Real COM, TCP Server, TCP Client, UDP, Pair Connection, RFC2217, Terminal, Reverse Telnet, Ethernet Modem, Printer, PPP, Disabled							
Secure Operation Modes	Secure Real COM, Secure TCP Server, Secure TCP Client, Secure Pair Connection, SSH, Reverse SSH							
Terminal Sessions	8 sessions per port							
<b>Physical Characteristics</b>								
Housing	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)
Weight	3600 g	3600 g	3460 g	3460 g	3580 g	3580 g	3600 g	3600 g
Dimensions (mm)	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44	440 x 195 x 44
<b>Environmental Limits</b>								
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
<b>Power Requirements</b>								
Input Voltage	100 to 240 VAC	±48 VDC	100 to 240 VAC	±48 VDC	100 to 240 VAC	±48 VDC	100 to 240 VAC	±48 VDC
Power Consumption	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V	285 mA @ 100 V 190 mA @ 240 V	293 mA @ 48 V
<b>Regulatory Approvals</b>								
EMC	CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A							
Safety	UL (UL60950-1), TÜV (EN60950-1)							
EMS	EN61000-4-2 (ESD), Level 3 EN61000-4-4 (EFT), Level 2 EN61000-4-5 (Surge), Level 2							
<b>Reliability</b>								
Buzzer, RTC, WDT	√	√	√	√	√	√	√	√
MTBF	68707 hrs	68707 hrs	135370 hrs	135370 hrs	101783 hrs	101783 hrs	68177 hrs	68177 hrs
Warranty	5 years (see www.moxa.com/warranty)							