

INVITATION TO SUBMIT PROPOSAL

1. The Home Guaranty Corporation (HGC) invites all interested suppliers to submit price quotation for the supply of Network Switches and Accessories as follows:

2	48-port 10/100/1000 Gigabit with 4 with WebView (Mother Switch)	₱100,000.00
1	24-port 10/100/1000 Gigabit Switch with WebView – and PoE (Mother Switch for VPN)	45,000.00
16	24-port 10/100/1000 Gigabit Switch	288,000.00
1	16-port 10/100 VPN Router	16,000.00
3	Wireless-N Gigabit Security Router with VPN	39,000.00
2	Wireless-N Access point	12,000.00
	Total	₱ 500,000.00

2. The following are the Technical Specifications:

Abstract	A 48-port Gigabit Ethernet Managed Switch with Web View that allows administrator to expand network securely. Configuration of the switch must be secured using SSL for Web access and SSH for Telnet access. User control must be secured using 802.1x securities using a RADIUS authentication mechanism and can be controlled using MAC filtering.
Product Name	Managed 48-Port 10/100/1000 Gigabit Switch with Web View + 4 Shared Mini GB
Product Type	Ethernet Switch
Dimensions	1.75" Height x 17" Width x 13.78" Depth
Expansion Slots	(4 Total) SFP (mini-GBIC) Shared
Interfaces/Ports	48 x RJ-45 10/100/1000Base-T LAN
Number of Ports	48
Layer Support	2 3
Connectivity Media	Category 5, 5e UTP 10/100/1000Base-T
Management	<ul style="list-style-type: none"> • QoS: 4 priority queues together with the Weighted Round Robin • Rate Limiting: Ingress Policer, Egress Shaper • SNMP RMON, Telnet, and HTTP Management options • WebView monitoring allows administrators to view the current status and configuration using their favorite web browser • Port based and 802.1q based VLAN's support up to 256 VLANs • Port Mirroring: Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe • VLAN Port-based and 802.1q based VLANs, Private VLAN Edge (PVE),

	Management VLAN
Performance	96Gbps Switching Capacity Non-blocking
Network Technology	10/100/1000Base-T
Additional Information	<ul style="list-style-type: none"> • Forty-eight high-speed ports optimized to support bandwidth-intensive applications • 802.1x security • RADIUS authentication • MAC filtering • Port Trunking for up to 8 groups allows you to increase your bandwidth for each uplink or Server connection • Containment of storms: Broadcast, Multicast, and Unknown Unicast

Abstract	A 24-port Gigabit Ethernet Managed Switch with Web View that allows administrator to expand network securely. Configuration of the switch must be secured using SSL for Web access and SSH for Telnet access. User control must be secured using 802.1 x securities using a RADIUS authentication mechanism and can be controlled using MAC filtering.
Product Name	Managed 24-Port 10/100/1000 Gigabit PoE Switch with WebView QoS
Product Type	Ethernet Switch
Number of Ports	24
Expansion Slots	(2 Total) SFP (mini-GBIC)
Input Voltage Range	100V AC to 240V AC
Dimensions	1.73" Height x 16.93" Width x 13.78" Depth
Interfaces/Ports	24 x RJ-45 10/100/1000Base-T LAN 1 x Console Management
Input Voltage	110V AC 220V AC
Management	<ul style="list-style-type: none"> • Telnet • WebView • SNMP 1, 2c • Web User Interface • IEEE 802.1p CoS • IEEE 802.1q based VLANs • RMON groups (history, statistics, alarms, and events)
Layer Support	2
Connectivity Media	<ul style="list-style-type: none"> • Category 5 UTP 10/100Base-TX • Category 5e UTP 1000Base-T
Product Model	SRW2024P

Performance	48Gbps Switching Capacity Non-blocking 2Gbps Throughput Per Port
Network Technology	10/100/1000Base-T
Additional Information	<ul style="list-style-type: none"> • Twenty-four high-speed ports optimized to support bandwidth-intensive applications • Power over Ethernet powers up to 12 attached devices for increased placement options • PoE on 12 10/100 ports supplies up to IEEE 802.3af maximum of 15.4W per port

Product Name	Unmanaged 24-Port 10/100/1000 Gigabit Switch
Product Type	Ethernet Switch
Dimensions	13.74" Height x 17" Width x 1.75" Depth
Expansion Slots	(2 Total) SFP (mini-GBIC)
Input Voltage	110 V AC
Interfaces/Ports	24 x RJ-45 10/100/1000Base-T LAN
Form Factor	Rack-mountable
Number of Ports	24
Input Voltage Range	110 V AC to 120 V AC
Address Table	32 K MAC Address -
Power Source	Power Supply
Layer Support	2
Connectivity Media	Category 5 Twisted Pair 10/100/1000Base-T
Certifications & Standards	<ul style="list-style-type: none"> • IEEE 802.3 • IEEE 802.3u • IEEE 802.3x • IEEE 802.3ab • FCC Class B • CE
Flow Control	IEEE 802.3x (Full-duplex)
Status Indicators	<ul style="list-style-type: none"> • System • 1 through 24
Humidity	20% to 95% Non-condensing Operating 5% to 95% Non-condensing Storage
Power Consumption	100 W @
Temperature	32F (0C) to 122F (50C) Operating -40F (-40C) to 158F (70C) Storage
Network Technology	10/100/1000Base-T
Additional Information	<ul style="list-style-type: none"> • Forwards and filters packets at non-blocking, full wire speed

	<ul style="list-style-type: none"> • Supports half duplex and full duplex modes auto-negotiation for all ports. • 24 high-speed ports optimized to support bandwidth-intensive applications • Specialized for a rack-mount installation
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Abstract	<p>The 16-Port VPN Router must have two (2) dedicated Internet ports.</p> <ul style="list-style-type: none"> • Connect a second Internet line as a backup. • Or use both Internet ports for maximum bandwidth efficiency.
Product Name	16-Port 10/100 VPN Router - Multi WAN
Product Type	Router
Dimensions	1.75" Height x 11" Width x 9.50" Depth
Interfaces/Ports	13 x RJ-45 10/100Base-TX LAN 2 x RJ-45 10/100Base-TX WAN 1 x RJ-45 10/100Base-TX DMZ
Form Factor	Rack-mountable Wall-mountable Desktop
Number of Ports	16
Protocols	FTP DHCP TCP/IP NAT NTP DNS WINS PPTP PPPoE SMTP RIP v2.0 RIP v1.0 POP3 L2TP
Power Source	Power Supply
Connectivity Media	Category 5
Certifications & Standards	Standards: <ul style="list-style-type: none"> • IEEE 802.3 • IEEE 802.3u Certifications: <ul style="list-style-type: none"> • FCC Class B • CE Class B • Canadian ICES-003 • EN55022 Emission

	<ul style="list-style-type: none"> EN55024 Immunity
Controls	Reset Switch
Status Indicators	<ul style="list-style-type: none"> Diag System Link/Act 1-13 Internet/Act 1-7 DMZ
Humidity	10% to 85% Non-condensing Operating 5% to 90% Non-condensing Storage
Input Current	5 A
Management	<ul style="list-style-type: none"> Web Telnet SNMP Setup Wizards
Temperature	32F (0C) to 104F (40C) Operating
Input Voltage Range	3.3 V DC
Additional Information	<ul style="list-style-type: none"> Up to 7 10/100 RJ-45 Internet Ports
System Requirements	<ul style="list-style-type: none"> Broadband Connection for Internet Connection Sharing TCP/IP Protocol installed on each PC
Abstract	<p>The Wireless Gigabit Security Router with VPN implements draft IEEE 802.11n (Wireless-N) technology.</p> <ul style="list-style-type: none"> Must feature a built-in 4-port full-duplex 10/100/1000 Gigabit Ethernet switch. Should have an effective data rate resulting in greater than 100 Mbps throughput and at least twice the range of Wireless G
Product Name	Wireless N Gigabit Security Router with VPN
Product Type	Wireless Security Router
Channels	11 USA
Frequency Band/Bandwidth	2.4 GHz IEEE 802.11b/g ISM Band USA
Transmission Speed Details	300Mbps 54Mbps Auto-fallback IEEE 802.11g 6Mbps IEEE 802.11g 11Mbps Auto-fallback IEEE 802.11b 1Mbps IEEE 802.11b
Dimensions	5.16" Height x 7.8" Width x 7.8" Depth
Transmission Speed	300Mbps
Interfaces/Ports	4 x RJ-45 Auto-negotiating/ Auto MDI/MDI-X LAN
Wireless Security	<ul style="list-style-type: none"> IEEE 802.1x Port-based Radius Authentication (EAP-MD5, EAP-PEAP)

	<ul style="list-style-type: none"> • WEP, WPA-PSK, WPA2-PSK, WPA-ENT, and WPA2-ENT authentication (IEEE 802.11i ready) • MAC-based wireless access control
Modulation	<p>IEEE 802.11b:</p> <ul style="list-style-type: none"> • DSSS <p>IEEE 802.11g:</p> <ul style="list-style-type: none"> • OFDM <p>IEEE 802.11n:</p> <ul style="list-style-type: none"> • OFDM
Certifications & Standards	<ul style="list-style-type: none"> • FCC class B • CE • ICES-003 • IEEE 802.11n (Draft) • IEEE 802.11g • IEEE 802.11b • IEEE 802.1x • IEEE 802.11i • IEEE 802.11e
Security Features	<ul style="list-style-type: none"> • Network address translation (NAT) • DMZ • IP Sweep Detection • Application Anomaly Detection (HTTP, FTP, Telnet, RCP) • P2P Control • Instant Messenger Control • L3-L4 Protocol (IP, TCP, UDP, ICMP) Normalization • URL blocking • Keyword blocking • IEEE 802.11e - Ready (wireless QoS) • IP-based Access Control List (ACL) • Stateful Packet Inspection (SPI) firewall <p>VPN:</p> <ul style="list-style-type: none"> • 3DES encryption • VPN passthrough of PPTP, L2TP, IPSec • MD5/SHA1 authentication • IPSec NAT-T
Management	<ul style="list-style-type: none"> • SNMP version 1, 2c • Port-based VLAN • Event Logging: Local, syslog, e-mail alerts • Firmware upgradable through web browser • Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Antenna	3 x 2dBi Omni-directional External
Connectivity Media	Category 5 UTP
Data Transfer Rate	10Mbps Ethernet

	100Mbps Fast Ethernet 1Gbps Gigabit Ethernet
Input Voltage	12 V Device
Product Model	WRVS4400N
Wireless Technology	IEEE 802.11n (draft)
Number of Ports	4
Wireless Transmission Speed	300Mbps
Additional Information	<ul style="list-style-type: none"> • Secure, high-speed wireless access for small businesses • Superior level of security, including an intrusion-detection system

Product name	Wireless-N Access Point: PoE/Advanced Security
Product Type	Access point
Standards	Draft IEEE 802.11n, IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.3af (Power over Ethernet), 802.1x (security authentication), 802.11i security WPA/WPA2, WMM
Ports	Ethernet, Power
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5e or higher
LEDs	Power, Ethernet, Wireless, PoE
Operating system	Linux
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
Simple Network Management Protocol (SNMP) version	SNMP version 1, 2c
Event Logging	<ul style="list-style-type: none"> • Event logging • Email logging • Remote syslog
Web firmware upgrade	Firmware upgradeable through web browser
Diagnostics	Flash, RAM, LAN, WLAN
Dynamic Host Configuration Protocol (DHCP)	DHCP client
HTTP Redirect	Redirects initial user access to an external web server to display company logo or network usage policy

IPv6 host	<ul style="list-style-type: none"> • Support for management and control of access point over IPv6 • Supports RFC2460 (IPv6 protocol) and RFC4294 (IPv6 node requirements)
Multiple BSSID	Supports up to 4 BSSIDs, allowing the creation of multiple virtual access points
VLANs	Supports 802.1q - up to 4 VLANs
SSID to VLAN mapping	Supports mapping of SSIDs to VLANs to securely separate workgroups across wireless and wired domains
Spanning Tree	Supports 802.1d Spanning Tree Protocol to prevent loops when using wireless distribution system (WDS) links as redundant links in a distribution system
Operating modes	Access point mode, point-to-point bridge mode, point-to-multipoint bridge mode, repeater mode, wireless client mode
Load balancing	Allows bandwidth control with user-defined CPU usage ratios
Auto-channel selection	On boot-up, the access point selects the least congested channel
802.11d regulatory domain	Enables the access point to provide radio channel settings for client devices, facilitating easy client access as they move across regulatory domains
Security:	
WEP/WPA/WPA2	Wired Equivalent Privacy (WEP) 64-bit/128-bit, WPA-Pre-Shared Key (WPA-PSK), WPA2-PSK, WPA-ENT, WPA2-ENT
Access control	Wireless connection control: MAC-based
SSID broadcast	SSID broadcast enable/disable
Client isolation	Supports wireless client isolation between and within SSIDs
802.1X	Wireless clients can be authenticated through IEEE 802.1X
802.1X supplicant	Supports 802.1X supplicant on the Ethernet port to allow the access point to authenticate itself to the network
RADIUS server	Up to 2 RADIUS servers can be configured for redundancy purposes
WPS	Supports WPS, a WI-FI Alliance specification for simple and secure setup of a wireless network
Rogue access point detection	New access points detected that have not been categorized as known are logged as rogue access points, allowing the administrator to clamp down on unapproved devices in the network
QoS	<ul style="list-style-type: none"> • 4 queues • 802.1p VLAN priority • WMM wireless priority • Mapping of 802.1p VLAN priority to WMM wireless priority to maintain end-to-end QoS

Wireless:	
Spec/modulation	Radio and modulation type: 802.11b/DSSS, 802.11g/OFDM, 802.11n/OFDM
Channels	Operating channels: 11 North America, 13 most of Europe (ETSI and Japan)
Internal antennas	None
External antennas	3 (omnidirectional)
Transmit power	<p>Transmit power @ normal temp range for FCC:</p> <p>802.11b: 16 dBm @ 1TX, 19 dBm @ 2TX, 20.5 dBm @ 3TX 802.11g: 13 dBm @ 1TX, 16 dBm @ 2TX, 17.5 dBm @ 3TX 802.11n: 17 dBm @ 1TX @ MCS0~5/8~13, 13 dBm @ 1TX @ MCS6/14, 11 dBm @ 1TX @ MCS7/15, 20 dBm @ 2TX @ MCS0~5/8~13, 16 dBm @ 2TX @ MCS6/14, 14 dBm @ 2TX @ MCS7/15, 21.5 dBm @ 3TX @ MCS0~5/8~13, 17.5 dBm @ 3TX @ MCS6/14, 15.5 dBm @ 3TX @ MCS7/15</p> <p>Transmit power @ normal temp range for ETSI:</p> <p>802.11b/g/n: 13 dBm @ 1TX, 16 dBm @ 2TX, 17.5 dBm @ 3TX</p>
Antenna gain in dBi	2
Receiver sensitivity	<ul style="list-style-type: none"> • 802.11.n: 300 Mbps at -69dBm • 802.11.g: 54 Mbps at -73dBm • 802.11.b: 11 Mbps at -88dBm
Environmental:	
Dimensions W x H x D	6.69 x 6.69 x 1.60 in. (170 x 170 x 40.7 mm)
Weight	0.86 lb (39 kg)
Power	<ul style="list-style-type: none"> • 12V 1A DC input, and IEEE 802.3af compliant PoE • Max power draw: 10.1W
Certification	FCC, CE, IC
Operating temperature	32° to 104°F (0° to 40°C)
Storage temperature	-4° to 158°F (-20° to 70°C)
Operating humidity	10% to 85%, noncondensing
Storage humidity	5% to 90%, noncondensing
Package Contents	<ul style="list-style-type: none"> • Cisco WAP4410N Wireless-N Access Point with PoE • User guide on CD-ROM • Ethernet network cable • Power adapter • Product stands • Registration card

Minimum Requirements	<ul style="list-style-type: none"> • 802.11b, 802.11g, 802.11n wireless adapter with TCP/IP protocol installed per PC • Switch/router with PoE support or PoE injector when used with PoE • Web-based configuration: Java-enabled web browser
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3. *The Approved Budget for the Contract (ABC) is ₱500,000.00 chargeable against Corporate Funds.*
4. *All interested suppliers may submit proposal to the Administrative Department, Ground Floor, Jade Bldg., 335 Sen. Gil J. Puyat Ave., Makati and/or through telefax number 752-53-20 on or before 2:00 p.m. of March 10, 2010.*
5. *For further inquiries, please call the HGC BAC Secretariat at telephone Nos. 897-32-94 and 897-32-66.*
6. *The HGC Bids and Awards Committee reserves the right to reject any or all bids or waive any required formality therein or to accept the bid as may be considered most advantageous to the Corporation.*

CORAZON G. CORPUZ
Vice-Chairperson
Bids and Awards Committee

