



GOVERNMENT OF PAKISTAN
PAKISTAN METEOROLOGICAL DEPARTMENT
TROPICAL CYCLONE & WARNING CENTRE
METEOROLOGICAL COMPLEX, UNIVERSITY ROAD,
KARACHI-75270

TCK-3(1)/P&M/2008/

Dated: May 14, 2008

TENDER NOTICE

Pakistan Meteorological Department Karachi invites tenders from reputable firms registered with the Sales Tax & Income Tax Department for the supply of following items for its project TROPICAL CYCLONE WARNING CENTRE (TCWC) Karachi & Islamabad/Gawadar

Item No	Description	Qty	Closing Date & Time	Opening Date & Time
1	LCD Display	4	30-05-2008 11:00 pm	30-05-2008 11:30 pm
2	High Performance All-in-One On-line Data Storage	2	- do -	- do -
3	IT-related Items	--	- do -	- do -
4	Furniture	--	- do -	- do -
5	Fax Machine	2	- do -	- do -
6	Photo Copier	2	- do -	- do -

Tenders in a "SEALED" cover separately for each item No. bearing the words "QUOTATION FOR SUPPLY OF ITEMS No. ___ FOR PROJECT TCWC" should reach the following address, on/before 30-05-2008 at 11:00 am.

The tender will be opened at 11.30 pm dated 30-05-2008 in the presence of the suppliers who may like to be present. This office reserves the right of rejection or acceptance of lowest offer without assigning any reason. Validity of offer should be at least 60 days. A pay order of 2% earnest Money (Returnable) should be enclosed, if the total cost of tender exceeds from Rs.40,000/- in favour of Director-General, Meteorological Services Karachi.

Delivery of stores will have to made at the Central Met. Stores, University Road, Karachi on any working day during the office hours.

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Technical Specification of LCD Display (SONY, Japan)

5 Nos.

- widescreen HDTV (40" ~ 50" range) (16:9 aspect ratio)
- high-gloss black finish
- built-in digital (ATSC) and analog tuners for over-the-air TV broadcasts (antenna required)
- built-in QAM cable TV tuner receives unscrambled programs without a set-top box (cable service required)
- upto 1920 x 1080 pixels
- upto 120 Hz anti-blur for clearer motion
- upto 8-millisecond pixel response time
- 3000:1 contrast ratio (30,000:1 dynamic)
- 178°(H) x 178°(V) viewing angle
- built-in Digital video processing
- built-in Advanced Contrast Enhancer (ACE) dynamic backlighting for better contrast and black levels
- 1-tuner picture-in-picture
- built-in TV Guide On Screen program guide
- built-in stereo speakers (10 watts x 2)
- remote control
- picture settings memory for each video input
- 9 A/V inputs, including:
 - 3 composite video (2 rear, 1 side)
 - 1 S-video
 - 2 component video (accepts signals up to 1080p)
 - 4 HDMI (3 rear, 1 side) — accepts signals up to 1080p (60Hz, 24Hz)
- PC input: analog RGB (D-Sub 15-pin)
- RF input for antenna/cable signals
- Optical digital audio output for Dolby® Digital
- DMex port for connecting optional add-on modules
- Energy Star® compliant
- detachable stand
- wall-mountable (bracket not included)
- Digital Inputs & Outputs
- HDMI Inputs 3 Rear 1 Side
- DVI Inputs None
- IEEE 1394 Inputs None
- PC Input Rear
- Optional Digital Audio Outputs
- RF Inputs 1
- Side Panel Composite Inputs
- One Side Panel Audio Inputs
- Two Rear Composite Video Inputs
- One Rear S-Video Inputs
- Two Rear Component Video Inputs
- Eight (8) Rear Panel Audio Inputs
- Nine Total Video Inputs

Warranty 18 Months

Specification of On-Line Data Storage (HP)

Description / Headline	All-in-One 10.00 TB SAS Storage Blade (Server + Storage)	2 Nos.
	<p>Integrated Application Data Storage (iSCSI SAN), Integrated File Serving (NAS), Integrated Data Protection</p> <ul style="list-style-type: none"> • Shared storage solution for BladeSystem application servers: • Should efficient use of storage capacity and easily accommodates growing applications: • Should Best Practice toolkit makes every IT Administrator look like a storage expert: • Should Enhanced file serving for clients (NAS) to improve productivity and collaboration: • Should Comprehensive and integrated data protection to ensure easy roll-back and disaster recovery: • Should Easy to deploy and manage: • Should Application-centric storage management simplifies operation: 	
Form Factor	BladeSystem half-height blades 10U or 6U Rack	
Processor Type/Description	Two Quad-core Intel Xeon E5345 (2.33 GHz/1333 FSB) Cache Memory 2 x 4MB L2 in each server	
Memory Standard/Max	4GB supportable upto 16GB	
Storage Included	10.00TB or more supportable upto 12 drive SAS or SATA	
Remote Management	iLO2	
Expansion Slots	(2) additional I/O expansion slots via mezzanine card	
File Serving Support	CIFS, NFS, FTP, HTTP	
Microsoft Exchange Performance Sizing	Should support up to 500 Exchange mailboxes under average workload.	
Application Expansion Support (iSCSI Initiators)	Compliant with iSCSI industry standards including iSCSI initiator support for Microsoft, Linux, BSD, AIX, and Solaris.	
Data Protection Features	<p>Hardware RAID (0/1/5)</p> <p>Snapshots (448 per iSCSI/Application area. 64 for file shares. Assumes a common volume)</p> <p>Integrated Tape Backup Software (HP Data Protector Express)</p>	
Replication Features	<p>File Share replication to 2nd SB600c using Microsoft DFS-R.</p> <p>iSCSI target replication to 2nd SB600c via optional HP StorageWorks Storage Mirroring</p>	
Storage Controller	E200i and P400	
Network Controller	Integrated single port NC373i Multifunction Gigabit Server Adapter	
Operating System	Microsoft Windows Storage Server 2003 R2 (Standard Edition)	
Optical Drive	External DVD via USB	
Software Support	One year of software advisory and remedial software support.	
What's in the Box	All-in-One Storage Blade; Documentation CD; Quick Start Poster; Safety warnings with translations; warranty card with translations; power cable (localized in AiO600 only); Quick Restore DVD. MUI (multilingual user interface) DVD.	
Optional PCs	System Processor Intel Pentium IV Core 2 Duo 2.66 GHz processor with 1033 FSB. Chipset Intel 965G with ICH 5	5 Nos.

Cache	512 KB Cache
Memory	1 GB SDRAM
Hard Drive	80 GB / 120GB
Floppy Drive	3.5" 1.44MB FDD
Combo Drive	CD-RW
NIC	Pro 1000 MT Integrated. WLAN 802.1g
Modem	56K v 92 internal modem
Monitor	17" Monitor LCD wide
Casing	ATX
Keyboard	MicroSoft Click multimedia
Mouse	Optical

10U or 6U type Rack

Capacity	
Device bays	Up to 16 Half-Height Blades or Up to 8 Full Height Blades Mixed configurations supported
Interconnect bays	8 any I/O fabric
Power supply	Up to 6 x 960/2250W
Fans	Up to 10
Onboard Administrator	1 Standard, optional redundant OA
Height	10U or 6U Rack or Tower
Power	
3-phase North America & Japan model	2 x NEMA L15-30p
3-phase International model	2 x IEC 309 5-Pin, 9h, Red, 16A
Single-phase model	6 x IEC-320 C20
Interconnects	
Ethernet	HP 1/10Gbit Virtual Connect Ethernet Module HP 1Gb Ethernet Pass-Thru Module CISCO Catalyst Blade Switch 3020 HP GbE2c Ethernet Blade Switch HP GbE2c Layer 2/3 Ethernet Blade Switch HP 1/10 Ethernet Blade Switch
Fibre channel	HP 4Gbit Virtual Connect Fibre Channel Module HP 16 port 4Gb FC Pass-Thru Module Brocade 4Gb SAN Switch CISCO MDS 9124e 4Gbit SAN Switch
InfiniBand	HP 4X DDR IB Switch Module
Dimensions	
Height	10U or 6U
Width	17.5in (445 mm) fits 19 inch rack
Depth	32in (813 mm)
Deployment	
Management	Windows: Insight Control Environment for BladeSystem - 3-Phase North America, 3-Phase International and Single Phase Linux: Insight Control Linux Edition - Single Phase model only CTO Software Bundles: Insight Control Linux Edition, Insight Control Environment for BladeSystem, Single-Phase, 3-Phase NA/JPN, 3-Phase International

UPS

Two 5 kVa with a minimum of two hours backup on full load
(for online data storage)

Five 1 kVa with minimum of one hours backup of full load
(for attached computer)

Warranty - year(s) (parts/labor/onsite) 3-3-3

Specification of IT Equipment

To facilitate Briefing and Display hall of newly constructed building for Tropical Cyclone Warning Center with LAN/Internet connectivity list of required items/radicals has been prepared for approval and further necessary action.

S/No.	Description	Qty
1	Metal Cabinet for Switch/Router 3U type	One
2	24 port switch (giga-bit) Linksys	One
3	Router /Access Point plus Gateway megabit/gigabit Linksys	Two
4	WLAN 802.1g Card Linksys	Ten
5	Single Wall Face Plate Cat5e RJ45 Network LAN Faceplate with 2 RJ45 ports	Twenty
6	Cat6 wire (2000 feet)	Two Roll
7	PANEL UTP 24 PORT CAT5-E	One
8	Channel strip 2" width	2000m
9	CAT5E or CAT6 UTP Patch Cord	Twenty
10	RJ-45 connector	Two hundred
11	Crimping tool for LAN connector and face plate	One
12	Power extension board (multi-socket)	Ten

Specifications of Fax, Photocopier

S. No.	Item	Specifications	Qty
2	Fax Machine	Offset Paper, Answering Machine, Hand Set, Programmable functions for recipient list etc	02
3	Photocopier	Copy Size maximum A3, minimum A5 RADF (Reverse Automatic Document Feeder) A3 Size Leaser Network Printer Electronic Sorting Paper Capacity 1500 Sheets LCT Universal Tray 550 Sheets Total Paper Capacity 2100 Sheets Departmental Counter Self Diagnostic Optional: A3 Size Network Scanner	02

Furniture and Fixture

S.No	Dscription	Size	Qty
1	Tables (glass top) and wooden material by LASANI	4 x 7 with side rack	2
		3.5 x 6 with side rack	8
		3 x 5 with side rack	12
2	Computer Table (glass top) and wooden material by LASANI with revolving chair	2.5x4	20
3	Chairs	Executive	2
		Officer (revolving big)	8
		Officer (revolving small)	12
		Staff	11
		Visitor chair	30
4	Wooden Almerah Glass sliding door (In two floor)	6 x 4 x 1.5	4
5	Sofa set i.e. 2 three seats sofa, one corner table, one center table and two small tables (with glass top)		1 set