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En la respuesta mencionar L/OA/C.81/09

San José, 8 de diciembre de 2009

San José, 07 de diciembre de 2009.

\$1.4903 d/v.

Ingeniero  
Herman Rosa Chávez  
Ministro  
Ministerio de Medio Ambiente y Recursos Naturales  
San Salvador, El Salvador

Estaciones Autom. Meteor.

Excelentísimo señor Ministro:

En el marco del proyecto Estaciones Meteorológicas Automáticas para la Rehabilitación de la Red Hidrometeorológica de El Salvador, financiado por el Fondo Fiduciario de España en la OMM, a fin de fortalecer la red hidrometeorológica de la DGSNET, se realiza, a través de la presente, la donación del equipo descrito a continuación, a la Gerencia de Meteorología de la Dirección General del Servicio Nacional de Estudios Territoriales (DGSNET), del Ministerio de Medio Ambiente y Recursos Naturales (MARN):

Item Type	Description	Qty	Unit price EUR	Total price EUR
Station Solutions	Vaisala Surface Weather System			
<u>Solution 6 (El Salvador)</u> - Station No.1 (with LC), Station No.2 (with LC)				
MAWS301DCP Conf.code: ANNENN8L3N7NNANN1NNA 1NNN	Hydromet System MAWS301 incl.	2	3,980.00	7,960.0
	A: Standard Assembly for Data Collection Platform (DCP) including: QML201A Logger with 1.6 MB Flash Memory for Data Logging and Mounting Plate 1 x RS-232 (3-w) and 1 x RS-485 (2-w) port RTC Clock, Compact Flash Card Place and Extended RAM Product Manuals in PDF Format Lizard Setup Software and Terminal Software YourVIEW Software (Basic) E: ENC542PLM Polyester Enclosure for DCP with Installation Frame and Radiation Shield 8: Two (2) Locks with Alarm for DCP using ENCPLM542 L: Mast Mounting Set for DCP using ENCRST / PLM542 on Pole Mast (6m/10m w. dia 100mm) 3: Solar Panel Acc.Set for DCP with Connector and Wiring to Solar Panel 33W			

1 Marca VAISALA  
DCP M. MAWS301DCP  
Ser. 54302  
2 Ser. E 41301

See Act. #370  
for decision  
to decision 9 groups  
punto 2/01/11m  
para el Ministerio  
MARN  
MINISTERIO DE MEDIO AMBIENTE Y RECURSOS NATURALES  
DIRECCION GENERAL DEL SERVICIO NACIONAL DE ESTUDIOS TERRITORIALES  
LOGISTICA  
EL SALVADOR, C.A.

MINISTERIO DE MEDIO AMBIENTE Y RECURSOS NATURALES  
22 DIC. 2009  
No. 7524 HORA: 1.50pm  
RECIBIDO POR: [Signature]

Inv. 009-012-024-010-00005  
06 ✓ Descargado

	7: Backup Battery Acc.Set for DCP with Mounting, QBR101C Battery Regulator and Wiring to 52Ah/12V Internal Battery			
	A: Standard Calibration for DCP			
	A: Standard Configuration for DCP with Metric Units (or Knots)			
	1: QM118 Digital I/O Module for DCP			
	K: GOES Interface for DCP with GPS, Mounting, Connectors and Wiring to Omnisat Transmitter via RS-232 (5-w)			
MAWS301DCP-OPTIONS Conf.code: KT34NNA2B1D1NNNNNNNN NNNN	4: DSU232 Dual RS-232 Module for DCP (2 x RS-232 (3-w)) A: Sensor Interface for DCP with Connector and Wiring to one (1) HMP155 Air Temperature and Relative Humidity Sensor 2: Sensor Interface for DCP with Pressure Inlet Port, Hose, Mounting and Wiring to one (1) PTB220 Digital Barometer via RS-232 (3-w) B: Sensor Interface for DCP with Connectors and Wiring to one (1) WA15 Mechanical Wind Sensors (not Heated) via QM118 1: Sensor Interface for DCP with Connector and Wiring to one (1) SBS1000 Tipping Bucket Rain Gauge (Not Heated) D: Sensor Interface for DCP with Connector and Wiring to one (1) CMP6 / CMP11 / CMP21 Pyranometer (ISO First Class / Secondary Standard Thermopile)			
MAWS-OPT(SOLAR) SOLAR33-75	Solar Panel Sets Incl. Solar Panel Set (33W) for Pole Mast (75/80mm)	2	560.00	1,120.00
MAWS-OPT(BATT) 215050 215050	Backup Batteries Incl. Battery 12V 28Ah Battery 12V 28Ah	2	140.00	280.00
MAWS-OPT(GOES) V1001200  214705 GPSFIXPLATE 443A Z2213067SPEC	GOES Satellite Communication Incl. GOES Transmitter 100/300/1200B GPS (Omnisat) GPS Antenna W/Cables,SMA Fixture Kit for GPS Antenna Antenna, X Yagi 10Db Gain Antenna Cable RG213 (N/N) (Spec length, std 3 m)	2	2,150.00	4,300.00
MAWS-OPT(RHT) HMP155D2AB11A0A1A1A0A	Air Temp, RH and Dew Point Incl. Humidity Probe with 3.5 m Cable	2	1,090.00	2,180.00
HMP155ADDITIONALT 19369  DTR13P44	Air Temperature Probe with 2 m cable Connector, Round, IP67, 5P,R,M12,Cable,Shielded Radiation Shield for T/U Sensor with Mounting Kit (installed on pole mast 60- 100 mm)			
MAWS-OPT(PTB) PTB220 Conf.code: AAA1A1A1AB	Atmospheric Pressure Incl. Pressure Transmitter (with one (1) pressure transducer, Class A accuracy)	2	1,290.00	2,580.00
MAWS-OPT(WIND) WA15 Conf.code: D1A WAC151RST-60 DRW222447  DRW222446	Wind Speed and Direction Incl. Wind Set Support Arm for WA151 Sensors Cable, Signal/ Power M12 8P, Open to Male, 10m Cable, Signal/ Power M12 8P, Open to Female, 10m	2	1,420.00	2,840.00
MAWS-OPT(RAIN) SBS1000  RGSTAND1140	Rain / Precipitation Incl. Precipitation Sensor SBS1000 with 10 m Cable and Connector, Sensitivity 0.1 mm (installed either on ground plate or stand)  Pedestal for Rain Gauge (Height 1140 mm; Total Height with Sensor 1500 mm)	2	1,260.00	2,520.00
MAWS-OPT(SRAD) 219469 KZFIXPLATE  19369	Solar Radiation Incl. Pyranometer CMP6 (ISO 1. Class) Fixture Kit for CMP3/CMP6/CMP11/CMP21/CUV4/QMS 101 Connector, Round, IP67, 5P,R,M12,Cable,Shielded	2	1,870.00	3,740.00
MAWS-OPT(SRAD-Stand)	Solar Radiation Stand 1.5m stand for CMP6	2	400.00	800.00

**B. Computer Hardware**

**MAWS-OPT(Dell-LC)** Dell Latitude D531  
 PROCESSOR: Mobile AMD Sempron Processor 3600+  
 OPERATING SYSTEM: Genuine Windows Vista® Home Basic Service Pack 1, With media  
 WARRANTY & SERVICE: 1 Year Limited Warranty plus 1 Year Mail-In Service  
 LCD PANEL: 15.4 Inch Wide Screen WXGA LCD Panel  
 MEMORY: 1.0GB, DDR2-667 SDRAM, 2 DIMMS  
 HARD DRIVE: 80GB Hard Drive, 9.6MM, 5400RPM  
 OPTICAL DRIVE: 24X CD-RW/DVD w/ Cyberlink PowerDVD™  
 VIDEO CARD: ATI® Integrated Graphics Radeon™ X1270  
 WI-FI WIRELESS CARD: Dell Wireless™ 1395 802.11g Mini Card  
 BACKUP OS DRIVERS AND SYSTEM DOCUMENTATION: No System Documentation

2 2,400.00 4,800.00

Mod.  
 ① portatil DELL VOSTRO 1720  
 C/AGRO serie: 16265323505

② AIM serie: 17209701361

**D. Spare Parts**

**MAWS-OPT(RHT)** Air Temp, RH and Dew Point Incl. Humidity Probe with 3.6 m Cable  
**HMP155D2AB11A0A1A1A0A**  
**HMP155ADDITIONALT 19389** Air Temperature Probe with 2 m cable Connector, Round, IP67, 5P, R, M12, Cable, Shielded  
**MAWS-OPT(PTB)** Atmospheric Pressure Incl. Pressure Transmitter (with one (1) pressure transducer, Class A accuracy)  
**PTB220 Conf.code: AAA1A1A1AB**  
**MAWS-OPT(WIND)** Wind Speed and Direction Incl. Wind Set  
**WA15 Conf.code: D1A DRW222447** Cable, Signal/ Power M12 8P, Open to Male, 10m  
**DRW222446** Cable, Signal/ Power M12 8P, Open to Female, 10m  
**MAWS-OPT(RAIN)** Rain / Precipitation Incl. Precipitation Sensor SBS1000 with 10 m Cable and Connector, Sensitivity 0.1 mm (installed either on ground plate or stand)  
**SBS1000**  
**MAWS-OPT(SRAD)** Solar Radiation Incl. Pyranometer CMP6 (ISO 1. Class)  
**219469**  
**MAWS-OPT(BATT)** Backup Batteries Incl. Battery 12V 26Ah  
**215050**

1 620.00 620.00  
 1 1,290.00 1,290.00  
 1 1,070.00 1,070.00  
 1 1,120.00 1,120.00  
 1 1,810.00 1,810.00  
 1 72.00 72.00

**E. Services**

**SRH401** Installation Project Management Day and Installation at 2 sites  
 Installation supervision by Vaisala engineer, assisted by Buyer's technical personnel during the installation. Depends on the location and the number and type of the systems in question. Preparation work such as cable works, grounding, and civil works are not included and should be prepared by the Buyer according to instructions given by Vaisala prior to the arrival of Vaisala engineer. Hotel accommodation and traveling costs are included.  
**SRH801** Configuration Work - MAWS  
 MAWS configuration work according to project/delivery specifications. Duration: 6 working days.  
 Note: Evaluate duration separately according to the customer specifications and requirements.

1 7,270.00 7,270.00  
 2 900.00 1,800.00

**TOTAL (EUR) FOR AWS SYSTEM (FCA Helsinki, Finland, INCOTERMS 2000)** 46,172.00  
 Estimated CIP costs to the international Airport El Salvador. Actual costs will be invoiced. 1,500.00  
**TOTAL (EUR) FOR AWS SYSTEM (CIP, INCOTERMS 2000)** 49,672.00



Cordialmente.

Oscar Arango B.  
 Representante de la OMM

Conv. a \$1.4703

\$ 15,259.47 c/u Estación

\$ 1,632.32 c/u

laptop

C/AGRO  
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