



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Public Works and Government Services Canada
Canada Place/Place du Canada
10th Floor/10e étage
9700 Jasper Ave/9700 ave Jasper
Edmonton
Alberta
T5J 4C3
Bid Fax: (780) 497-3510

**SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Public Works and Government Services Canada
Canada Place/Place du Canada
10th Floor/10e étage
9700 Jasper Ave/9700 ave Jasper
Edmonton
Alberta
T5J 4C3

Title - Sujet Measurement Systems	
Solicitation No. - N° de l'invitation 01633-190808/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client 01633-190808	Date 2019-11-25
GETS Reference No. - N° de référence de SEAG PW-\$EDM-100-11713	
File No. - N° de dossier EDM-9-42095 (100)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-12-09	Time Zone Fuseau horaire Mountain Standard Time MST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Fisher, Drew	Buyer Id - Id de l'acheteur edm100
Telephone No. - N° de téléphone (780) 901-4270 ()	FAX No. - N° de FAX (780) 497-3510
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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01633-190808

Amd. No. - N° de la modif.
001
File No. - N° du dossier
EDM-9-42095

Buyer ID - Id de l'acheteur
EDM100
CCC No./N° CCC - FMS No./N° VME

This amendment has been raised to respond to the following question and make the following revisions:

Question 1:

What power supply will the researcher use to power the setup--will it be from a solar power system or direct AC Power?

Answer 1:

Solar power system

Question 2:

Does the researcher require a Biomet Package, which would include: tipping rain bucket, net radiometer, soil heat flux plates, humidity & temperature sensor, quantum sensor, pyranometer and phenocam?

Answer 2:

No

Question 3:

Does the researcher require a cellular modem for remote communication with the system?

Answer 3:

No

Question 4:

Please could you have clarified items 1 & 2 on the Mandatory Performance Specs.

For both it states minimum measurement rate of 10Hz or greater.

When referring to measurement rate is this

A. Measure the gas flow at 10HZ i.e. 1L cell, flow rate 1L/min measuring every 0.1 sec?

Or

B. Measure the gas that is being exchanged at a frequency of 10Hz? i.e. 1L cell, flow rate 10L/min measuring every 0.1 sec?

Answer 4:

Closer to b) but not exactly. The analyzer has to measure at 10 Hz minimum but in order for the system to have an adequate frequency response to be used for measuring CO2 or CH4 fluxes using the eddy covariance technique the residence time in the sample cell should be as close to half of this as possible or a residence time of about 0.05 s in the sample cell ideally (0.07 s would be okay) with concentration measured by the analyzer once every 0.1 s. So for a 1L cell the flow rate through the cell would have to

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be 850 to 1200 L/min. For a flow rate of 10 L/min the sample cell volume would have to be much smaller, about 8 to 12 mL to achieve this response.

On page 12 of 14 under “**COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS**”:

DELETE:

6.	Power consumption: 100 W maximum during analyzer(s) warm-up, 50 W maximum in steady state operation	M			
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INSERT:

6.	Power consumption: 1000 W maximum during analyzer(s) warm-up, 50 W maximum in steady state operation	M			
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On page 12 of 14 under “**COMPLIANCE MATRIX – MINIMUM MANDATORY PERFORMANCE SPECIFICATIONS**”:

Item # 7 is unreadable.

INSERT:

7.	Sonic anemometer must be 3-axis with a minimum measurement rate of 10Hz	D			
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All other terms and conditions remain the same.