

ID	SERVING	DESIGN FLOW (GPM)	MIN FLOW (GPM)	POWER In	Sensor Out	Fluid	Fluid Temp	Pipe Size
FM-1	FC-1	32	5.5	24V	4-20 ma	40% E.G.	75 F	2"
FM-2								2"
FM-3	CH-1 & CH-2	95	21	24V	4-20 ma	40% E.G.	15 F	3"
FM-4	HX-3	55	9.2	24V	4-20 ma	40% E.G.	15 F	2.5"
FM-5	HX-2	10	2.3	24V	4-20 ma	40% E.G.	15 F	1.25"
FM-6	HX-1A	25	5.5	24V	4-20 ma	40% E.G.	15 F	2"
FM-7	CP-7	10	2.3	24V	4-20 ma	40% E.G.	45 F	1.25"
FM-8	HX-1	20	5.5	24V	4-20 ma	40% E.G.	15 F	1.5"
FM-9	CP-4	35	5.5	24V	4-20 ma	40% E.G.	18 F	2.5"



# ASSOCIATION of UNIVERSITIES for RESEARCH in ASTRONOMY, INC.

UNDER COOPERATIVE AGREEMENT WITH THE NATIONAL SCIENCE FOUNDATION  
 OPERATING THE  
 NATIONAL OPTICAL ASTRONOMY OBSERVATORY  
 NATIONAL SOLAR OBSERVATORY  
 GEMINI OBSERVATORY  
 LARGE SYNOPTIC SURVEY TELESCOPE  
 DOING BUSINESS FOR

## PURCHASE ORDER N753200-H

September 07, 2016

Page 1 of 1

LSST, INC. - SOAR CONSORTIUM, INC. - WIYN CONSORTIUM, INC.

**Vendor:** MICRO MOTION, INC.  
 7070 WINCHESTER CIRCLE  
 BOULDER, CO 80301

MICMOTION

Please Reference the above Purchase Order Number on all shipping documents, packing lists, invoices and other correspondence.

Attn: david.schratz@emerson.com?

Terms applicable to this order are available at:  
<http://auracas.aura-astronomy.org/terms>  
 For a hard copy, contact the buyer listed below.

**Invoice To:** AURA, Inc.  
 Attn: Accounting  
 P.O. Box 26732  
 Tucson, AZ 85726  
 520 318-8000

**Ship To:** AURA Gemini Observatory  
 670 N. A'ohoku Place  
 Hilo, HI 96720

<b>INVOICE TERMS</b> Net 30 days	<b>TAX CODE</b> 3	<b>REQUISITION #</b> 0753200	<b>F.O.B.</b> Ship Point	<b>SHIP-VIA</b> Fed Ex 2nd Day-AURA Acct
-------------------------------------	----------------------	---------------------------------	-----------------------------	---

REQUESTER	LINE NO.	DESCRIPTION	REQUIRED DATE	QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE
CAVEDONI, CHARL	1	8750WDEW2A1FTSA010CA1M4G5 FLOWMETER, 8750W UTILITY, 010 Rosemount™ 8750W Utility Magnetic Flowmeter; 1 Inch (25 mm); Flanged Process Connections	10/20/2016	2.00	ea	2,487.26 \$	4,974.52
Cavedoni, Charl	2	8750WDEW2A1FTSA015CA1M4G5 FLOWMETER, 8750W UTILITY, 015 Rosemount™ 8750W Utility Magnetic Flowmeter; 1.5 Inch (40 mm); Flanged Process Connections	09/07/2016	1.00	ea	2,587.62 \$	2,587.62
Cavedoni, Charl	3	8750WDEW2A1FTSA020CA1M4G5 FLOWMETER, 8750W UTILITY, 020 Rosemount™ 8750W Utility Magnetic Flowmeter; 2 Inch (50 mm); Flanged Process Connections	09/07/2016	4.00	ea	2,655.11 \$	10,620.44
Cavedoni, Charl	4	8750WDEW2A1FTSA030CA1M4G5 FLOWMETER, 8750W UTILITY, 030 Rosemount™ 8750W Utility Magnetic Flowmeter; 3 Inch (80 mm); Flanged Process Connections	09/07/2016	1.00	ea	2,807.68 \$	2,807.68

Proposal no: 795588-3

AURA Internal Account Distribution

G-01330-100-105	20,990.26
-----------------	-----------

<b>Total:</b>	<b>\$</b>	<b>20,990.26</b>
---------------	-----------	------------------

DIRECT QUESTIONS CONCERNING THIS ORDER TO:

APPROVED BY: \_\_\_\_\_

Tito Agbayani

(808) 974-2506

AURA CAS Procurement



# Micro Motion, Inc.

7070 Winchester Circle  
Boulder, CO 80301  
(800) 522-6277

**PROPOSAL NO: 795588-3**

August 30, 2016

**To:** ASSOCIATION OF  
UNIVERSITIES FOR  
RESEARCH IN ASTRONOMY  
INC  
GEMINI OBSERVATORY 670 N  
AOHOKU PL  
HILO HI 96720-2700

**Attention:** Chas Cavedoni

**Phone:** 1 (808) 974-2520

**E-mail:** [ccavedoni@gemini.edu](mailto:ccavedoni@gemini.edu)

**Salesperson:** Dave Schratz

**Phone:** 925-980-3133

**Fax:** 800-665-6975

**E-mail:** [david.schratz@emerson.com](mailto:david.schratz@emerson.com)

**Reference:** GEMINI OBSERVATORY

**Proposal No:** 795588 - 3

## PROPOSAL SUMMARY INFORMATION

**Valid Until:** 29-OCT-16  
**Shipping:** 6 weeks ARO  
**Ultimate Destination:** United States

**Payment Terms:** Payment due in 30 days  
**Freight Terms:** UCC: FOB Origin Prepaid  
**Freight Charges:** Freight & Handling

### *For Application or Proposal Questions:*

**GIANCARLO MATHIEU**, Technical Contact (ISR)

Phone: 800-522-6277  
Fax: 800-665-6975  
Email: [West.FlowCSC@Emerson.com](mailto:West.FlowCSC@Emerson.com)

### *To Place Order or for Purchase Order Questions:*

**STACEY FONTE**, Business Administrator

Phone: 800-522-6277  
Fax: 800-665-6975  
Email: [West.FlowCSC@Emerson.com](mailto:West.FlowCSC@Emerson.com)

## ORDERING INFORMATION

When submitting a purchase order, please be sure to include the following information:

- Purchase Order Number
- Proposal # or Correct Pricing
- Quantity of each item
- Requested ship date from the factory
- Contact Info: Name, email, phone
- Ship To Company Name & Address
- Bill To Company Name & Address
- End User Company Name, Address
- End user Destination Country
- Payment Terms (Ex: Net 30)
- Any special requests
- Configuration Information

### Vendor Information:

**Micro Motion Inc.**  
7070 Winchester Circle, Boulder CO 80301  
(800) 522-6277



**PRICE SUMMARY**

Item	Qty	Description	Unit Price (\$)	Total Price (\$)
1.0	2	<p><b>8750WDEW2A1FTSA010CA1M4G5</b>            FLOWMETER, 8750W UTILITY, 010            Rosemount™ 8750W Utility Magnetic Flowmeter; 1 Inch (25 mm); Flanged Process Connections</p> <p><b>TAG:</b> FM-5;FM-7            8750W010            D FLOWMETER, 8750W UTILITY, 010            E Sensor Design Revision : Revision "D"            W Transmitter Class : Revision 3 Electronics            2 Transmitter Mount : Remote Wall Mount            Transmitter Power : DC Power Supply (12 to 42VDC)            A Transmitter Outputs : 4-20mA; Digital HART; Scalable Pulse            1 Conduit Entries : 1/2-14 NPT            F Sensor Style : Flanged            T Lining Material : PTFE            S Electrode Material : 316L Stainless Steel            A Electrode Type : 2 Measurement Electrodes - Standard            C Flange Type and Material : Slip-On, Raised-Face, Carbon Steel            A1 Flange Rating : ASME B16.5, Class 150            M4 Transmitter Display : Local Operator Interface            G5 Ground Ring : 316L Stainless Steel (Qty 1)            8712E Sub Models : 8712E</p>	2,487.26	4,974.52
2.0	1	<p><b>8750WDEW2A1FTSA015CA1M4G5</b>            FLOWMETER, 8750W UTILITY, 015            Rosemount™ 8750W Utility Magnetic Flowmeter; 1.5 Inch (40 mm); Flanged Process Connections</p> <p><b>TAG:</b> FM-8            8750W015            D FLOWMETER, 8750W UTILITY, 015            E Sensor Design Revision : Revision "D"            W Transmitter Class : Revision 3 Electronics            2 Transmitter Mount : Remote Wall Mount            Transmitter Power : DC Power Supply (12 to 42VDC)            A Transmitter Outputs : 4-20mA; Digital HART; Scalable Pulse            1 Conduit Entries : 1/2-14 NPT            F Sensor Style : Flanged            T Lining Material : PTFE            S Electrode Material : 316L Stainless Steel            A Electrode Type : 2 Measurement Electrodes - Standard            C Flange Type and Material : Slip-On, Raised-Face, Carbon Steel            A1 Flange Rating : ASME B16.5, Class 150            M4 Transmitter Display : Local Operator Interface            G5 Ground Ring : 316L Stainless Steel (Qty 1)            8712E Sub Models : 8712E</p>	2,587.62	2,587.62



3.0	4	<b>8750WDEW2A1FTSA020CA1M4G5</b> FLOWMETER, 8750W UTILITY, 020 Rosemount™ 8750W Utility Magnetic Flowmeter; 2 Inch (50 mm); Flanged Process Connections	2,655.11	10,620.44
-----	---	--	----------	-----------

**TAG:** FM-1;FM-4;FM-6;FM-9

8750W020	FLOWMETER, 8750W UTILITY, 020
D	Sensor Design Revision : Revision "D"
E	Transmitter Class : Revision 3 Electronics
W	Transmitter Mount : Remote Wall Mount
2	Transmitter Power : DC Power Supply (12 to 42VDC)
A	Transmitter Outputs : 4-20mA; Digital HART; Scalable Pulse
1	Conduit Entries : 1/2-14 NPT
F	Sensor Style : Flanged
T	Lining Material : PTFE
S	Electrode Material : 316L Stainless Steel
A	Electrode Type : 2 Measurement Electrodes - Standard
C	Flange Type and Material : Slip-On, Raised-Face, Carbon Steel
A1	Flange Rating : ASME B16.5, Class 150
M4	Transmitter Display : Local Operator Interface
G5	Ground Ring : 316L Stainless Steel (Qty 1)
8712E	Sub Models : 8712E

4.0	1	<b>8750WDEW2A1FTSA030CA1M4G5</b> FLOWMETER, 8750W UTILITY, 030 Rosemount™ 8750W Utility Magnetic Flowmeter; 3 Inch (80 mm); Flanged Process Connections	2,807.68	2,807.68
-----	---	--	----------	----------

**TAG:** FM-3

8750W030	FLOWMETER, 8750W UTILITY, 030
D	Sensor Design Revision : Revision "D"
E	Transmitter Class : Revision 3 Electronics
W	Transmitter Mount : Remote Wall Mount
2	Transmitter Power : DC Power Supply (12 to 42VDC)
A	Transmitter Outputs : 4-20mA; Digital HART; Scalable Pulse
1	Conduit Entries : 1/2-14 NPT
F	Sensor Style : Flanged
T	Lining Material : PTFE
S	Electrode Material : 316L Stainless Steel
A	Electrode Type : 2 Measurement Electrodes - Standard
C	Flange Type and Material : Slip-On, Raised-Face, Carbon Steel
A1	Flange Rating : ASME B16.5, Class 150
M4	Transmitter Display : Local Operator Interface
G5	Ground Ring : 316L Stainless Steel (Qty 1)
8712E	Sub Models : 8712E

<b>Sub Total (\$):</b>	20,990.26
<b>Total (\$):</b>	20,990.26