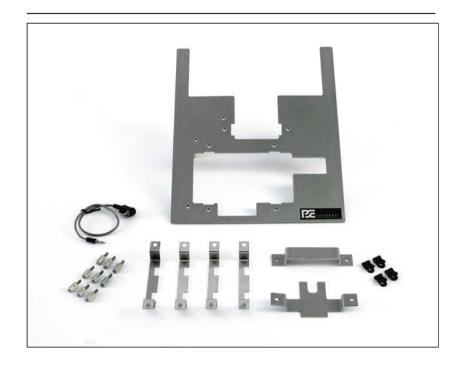


## **Process Analysis Carrier PGA-710C**



# **Operations Manual**



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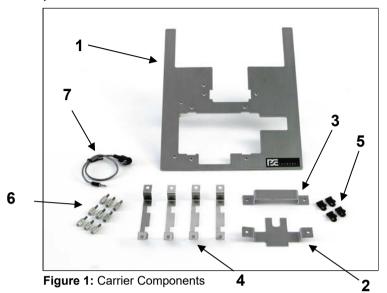
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### PROSTAT® PGA-710C PROCESS ANALYSIS CARRIER

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#### I. General Description

The PGA-710C Process Analysis Carrier is designed to transport Prostat instruments through automated assembly and conveying equipment for measuring and recording process electrostatic characteristics.



#### II. Assembling the PGA-710C for Use

Use the following steps to assemble the carrier and mount Prostat instruments.

- 1. Place the Field Meter Saddle (Item #2) into the Carrier Plate (Item #1) as shown in Figure 2
- 2. Align the Saddle to fit into Carrier notches and line up with threaded mounting screw holes.
- 3. Slide the PFM-711A field meter lower case groove into the Carrier Plate. Figure 3
- 4. Align the field meter ground snap with the Field Meter Saddle. Figure 4.

### **Carrier Components**

The PGA-710C consists of:

- 1. Carrier Plate
- 2. Field Meter Saddle
- 3. Field Meter Clamp
- 4. Four PGA-710 Straps
- 5. Cable Mounting guides
- 6. Nine Thumb Screws
- 7. Modified Analog Cable

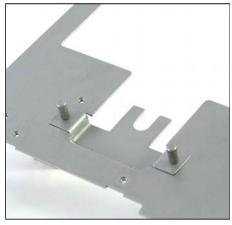


Figure 2: Placement of Field Meter Saddle into Carrier Plate



Figure 3: Mount PFM-711A into Carrier Plate



Figure 4: Seat the PFM-711A into Field Meter Saddle



Figure 5: Install Field Meter Clamp and Secure with 2 Thumb Screws

- 5. Install Field Meter Clamp (Item #3) over lower section of the instrument case
- 6. Secure Clamp with two Thumb Screws (Item #6). Do Not Over Tighten Thumb Screws; to do so may damage the instrument case.

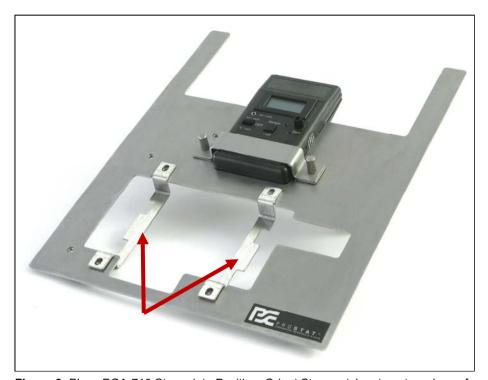
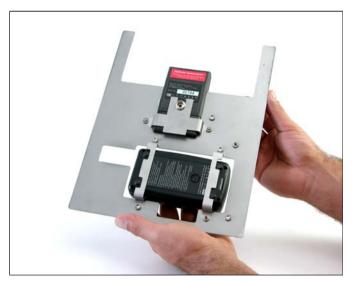


Figure 6: Place PGA-710 Straps into Position. Orient Strap notches to outer edges of the Carrier

- 7. Place two PGA-710 Straps (Item #4) into Carrier Plate as shown in Figure 6.
- 8. Position the Prostat PGA-710 AutoAnalysis System onto the Mounting Straps. The instrument's USB connection should face the extended opening in the Carrier Plate. This will allow data download without having to remove the PGA-710 from the Carrier.
- 9. Orient the Strap notches toward the outer edges of the Carrier Plate. The notches will accommodate the PGA-710 rubber feet located on the bottom of the instrument. Figures 7 & 8.



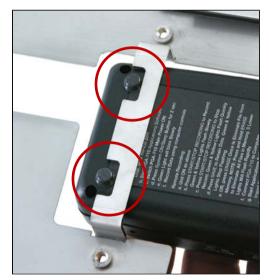


Figure 7 & 8: Mount PGA-710 in support Straps and locate rubber feet in Strap notches

- 10. Place two additional Straps over the upper case of the PGA-710 instrument. Figure 9.
- 11. Secure the instrument with 3 Thumb Screws as shown. Do not over tighten the Thumb Screws.

The PFM-711A Field Meter and PGA-710 AutoAnalysis System are now positioned in the Carrier Plate

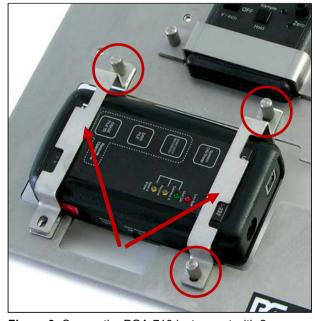


Figure 9: Secure the PGA-710 instrument with 2 upper Straps and 3 Thumb Screws







Figures 10 & 11: Connect and Mount Modified Analog Cable to PGA-710 and PFM-711A Field Meter using Cable Mounting Clips and Thumb Screws

- 12. Plug straight connector of the Modified Analog Cable (Item #7) into PGA-710 input receptacle. Figure 10
- 13. Slide Cable Mounting Clip (Item #5), flat side down, over Analog Cable and secure to PGA-710 Mounting Strap with Thumb Screw. Figure 10.
- 14. Plug right angle connector into PFM-711A analog output receptacle. Figure 11
- 15. Secure Modified Analog Cable to the Carrier Plate with remaining 3 Cable Mounting Clips and Thumb Screws as shown in Figure 11.
- 16. Mount the CPM-720 Charge Plate Monitor Assembly onto the PFM-711A Field Meter by sliding the CPM-720 lower ground plate into the lower groove of the field meter case. Figure 12.

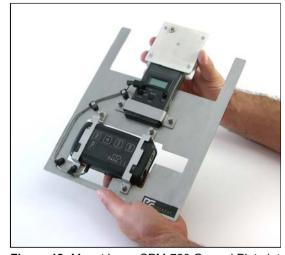


Figure 12: Mount lower CPM-720 Ground Plate into lower groove of PFM-711A case

#### **PGA-710C Process Analysis Carrier**

17. Be sure to completely seat the CPM-720 plate onto the flied meter. The front of the field meter should fill the CPM lower plate notch as shown in Figure 13.

NOTE: The field meter must completely fill the lower plate notch for accuracy and plate stability.

Figure 13: Field Meter fills the CPM-720 Lower Ground Plate to completely seat the plate assembly.

#### III. Additional Notes & Comments

Before using and making measurements with the Carrier Assembly:

- 1. Be sure the PGA-710 AutoAnalysis System is properly prepared (See PGA-710 "Operations" and "How to Measure" manuals for details regarding remote measurements:
  - a. The battery should be fully charged
  - b. The System should be zeroed and the time stamp corrected to the computer intended for data download
  - c. Double check the correct temperature and relative humidity setting; adjust as necessary
  - d. Erase the PGA-710 memory before starting a new series of remote recordings.
- 2. Ground the carrier assembly
  - a. Auxiliary ground may be connected to the ground snap of the PFM-711A field meter
  - b. A continuity to ground measurement from the carrier to equipment ground will confirm proper grounding and insure measurement accuracy
  - Ground the upper CPM plate, e.g., short the upper and lower plates, and zero the PFM-711A field meter

Once the system is prepared and instruments are operating, start recording data using the PGA-710 panel controls.

- 1. Stop the recording at the completion of the measurement.
- 2. Be sure to SAVE the file
- 3. Download data to the designated computer for analysis.

Rev: PGA-710C - 5-2009 Format modification: 01-20-2005

