The Process Plugins Kiviat Display feature mathematically converts PI data so that a polar plot may be easily displayed within a Process Book using the XY (Cartesian) plotting object. The Process Plugins toolset continually scans for certain PI tags which are used to customize each individual display, as described below. The Process Plugins Kiviat Display feature supports an unlimited number of displays. Each display may have any number of live inputs which become evenly spaced and rendered real-time around the display circle.

**FIELD INPUTS:**

- Ambler: 180.0
- Camden: 90.0
- Cherry Hill: 360.0
- Chester: 170.0
- Conshohocken: 350.0
- Malvern: 305.0
- Trenton: 250.0
- Yardley: 240.0

![Kiviat Display Chart](image)
PROCESS PLUGINS™ KIVIAT PI-TAG CONVENTION:

PPI.KIVIAT.NUMDISPLAYS – The value of this tag must equal the total number of Kiviat displays.

All other tag names end with the number identifying the display. # is used below for display number. Note that the display number never begins with “0”, but only uses the necessary number of digits.

PPI.KIVIAT.NUMINPUTS.# - The number of live inputs displayed around the circle.

PPI.KIVIAT.RADIUS1.# - The value of the radius of the first background circle
PPI.KIVIAT.RADIUS2.# - The value of the radius of the first background circle
PPI.KIVIAT.RADIUS3.# - The value of the radius of the first background circle
PPI.KIVIAT.RADIUS4.# - The value of the radius of the first background circle
PPI.KIVIAT.RADIUS5.# - The value of the radius of the first background circle
NOTE: All 5 of the Radius tags above must exist, but may be disabled with a value of 0.

PPI.KIVIAT.INPUTA1.# - The PRIMARY (red line on display) live input for value 1
PPI.KIVIAT.INPUTC1.# - The SECONDARY (blue line on display) live input for value 1
PPI.KIVIAT.INPUTA2.# - The PRIMARY (red line on display) live input for value 2
PPI.KIVIAT.INPUTC2.# - The SECONDARY (blue line on display) live input for value 2
Etc.

PPI.KIVIAT.INPUT1POS.# - The position on the circle (0-359) of Input 1

DEDICATED PLOT TAGS (values are written by code to these tags):

PPI.KIVIAT.XPLOT.# - X-axis plot tag
PPI.KIVIAT.YPLOTA.# - Y-axis plot tag for PRIMARY live inputs
PPI.KIVIAT.YPLOTB.# - Y-axis plot tag for background grid lines
PPI.KIVIAT.YPLOTC.# - Y-axis plot tag for SECONDARY live inputs (ie. Rolling Averages)
In Process Book, Data Retrieval Method for X Tag must be set to “Recorded”. The Plot Time should be set to the minimum time which will not cause the display to go black between updates. This may vary depending upon the size of the PI system, and the speed of the hardware. If the plot periodically goes blank, the Plot Time should be increased in 1 Minute increments.
Note that Data Retrieval Methods for Y Tags should be set to “Match”, and “Use for all Y tags” should be checked.
Contact us:
Process Plugins Inc.
2519 S. Shields St. #166
Fort Collins, Colorado 80526
1-970-266-8551
www.ProcessPlugins.com
Info@ProcessPlugins.com