

# Upper Limb plug-in for Report Generator 1.1

For **image**-type descriptors, the following options are available:

Option name	Description	Example
Function	Name of the generator function that will produce the output. Available generator: - UL_2DPlot_0_100 (image): plot a time-normalized (0 – 100%) curve	
Title	Title of the graph	Flexion
X-Label	X label for the graph	Cycle (0-100%)
Y-Label	Y label for the graph	Angle (°)
Y-Range	Y data range for the graph	[-20,30]
Positive Y-Label	Y label plotted for data where $Y > 0$	FI
Negative Y-Label	Y label plotted for data where $Y < 0$	Ext
Positive Y-Label X	X position for the positive Y label. Valid values from 0 to 100.	10
Positive Y-Label Y%	Y position (in % of the graph height, 0% is bottom) for the positive Y label. Valid values from 0 to 100.	70
Negative Y-Label X	X position for the negative Y label. Valid values from 0 to 100.	10
Negative Y-Label Y%	Y position (in % of the graph height, 0% is bottom) for the negative Y label. Valid values from 0 to 100.	20
Show Y=0 line	Whether to show a continuous line $Y = 0$	

When clicking on *Add data*, a new panel that allows to add extra data to the graph will drop down:

Option name	Description	Example
Path definition	How to define the path of the data inside the XML file. Options: - Direct (Suggested): the user does not require any XPath language knowledge. - XPath (Experts only): the user requires knowledge of the Xpath language	
Task	The task name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	HTH
Context	The context name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Right
Phase	The phase name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Phase1
Curve type	Which type of curve you want to plot ( <i>Direct path definition only</i> )	
Curve name	Name of the curve to plot, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	LTrunkFIExt
XPath	<a href="#">XPath</a> query string to get the curve data ( <i>XPath path definition only</i> )	
Color	Color used for representing the curves	
Plot type	Different options on how to plot the curves: - all curves: plot all the curves - mean curve: plot only the mean of all curves	

When clicking on *Add control data*, a new panel relative to additional reference data (as a colored band with bounds as  $MEAN \pm 1 SD$ ) for the graph will drop down:

Option name	Description	Example
Path definition	How to define the path of the data inside the reference data XML file. Options: - Direct (Suggested): the user does not require any XPath language knowledge. - XPath (Experts only): the user requires knowledge of the Xpath language	
Task	The task name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	HTH
Phase	The phase name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Phase1
Curve type	Which type of curve you want to plot ( <i>Direct path definition only</i> )	
Curve name	Name of the curve to plot, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	LTrunkFIExt
XPath	<a href="#">XPath</a> query string to get the curve data ( <i>XPath path definition only</i> )	
Color	Color used for representing the band representing the curve data.	
Show mean curve	Whether or not to show the mean curve (as a dashed black thick line)	

When clicking on *Add v. lines data*, a new panel relative to additional vertical lines data for the graph will drop down:

Option name	Description	Example
Path definition	How to define the path of the data inside the XML file. Options: - Direct (Suggested): the user does not require any XPath language knowledge. - XPath (Experts only): the user requires knowledge of the Xpath language	
Event	Name of the event to be plotted, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	GE2
Event at 0%	Name of the event defining 0% time, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	GE1
Event at 100%	Name of the event defining 100% time, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	GE3
Task	The task name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	HTH
Context	The context name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Right
Phase	The phase name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Phase1
XPath	<a href="#">XPath</a> query string to get the curve data ( <i>XPath path definition only</i> )	
Color	Color used for representing the band representing the curve data.	
Show mean curve	Whether or not to show the mean curve (as a dashed black thick line)	

For **text**-type descriptors, the following options are available:

Option name	Description	Example
Function	Name of the generator function that will produce the output. Available generator: - UL_Text (text): print a numeric value	

When clicking on *Add angle data (\*)*, a new panel relative to angle parameters will drop down:

Option name	Description	Example
Path definition	How to define the path of the data inside the XML file. Options: - Direct (Suggested): the user does not require any XPath language knowledge. - XPath (Experts only): the user requires knowledge of the Xpath language	
Task	The task name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	HTH
Context	The context name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Right
Phase	The phase name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Phase1
Curve name	Name of the curve from which to pick the parameter, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	LTrunkFIExt
Parameter name	Which data to select (in the indicated phase): min value, max value, initial value, final value ( <i>Direct path definition only</i> )	
XPath	<a href="#">XPath</a> query string to get the parameter ( <i>XPath path definition only</i> )	
Text type	Which statistic to select: mean value, std dev value.	

When clicking on *Add point data (\*)*, a new panel relative to marker parameters will drop down:

Option name	Description	Example
Path definition	How to define the path of the data inside the XML file. Options: - Direct (Suggested): the user does not require any XPath language knowledge. - XPath (Experts only): the user requires knowledge of the Xpath language	
Task	The task name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	HTH
Context	The context name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Right
Phase	The phase name, as in U.L.E.M.A. ( <i>Direct path definition only</i> )	Phase1
Parameter type	Which kind of parameters group to select: timing, speed, trajectory ( <i>Direct path definition only</i> )	
Point	Name of the marker. The requested spatio-temporal parameters for this point must have been calculated with U.L.E.M.A. ( <i>Direct path definition only</i> )	RRS
Parameter name	Which data to select (in the indicated phase): - for timing: phase duration (in s), percentage timing (duration of the phase in percentage of the duration of full motion cycle), time (in s) of max velocity - for speed: max velocity in the phase (in mm/s) - trajectory: index of curvature (ratio between the point trajectory length and the length of a straight line connecting final and initial position, in the phase), always $\geq 1$	
XPath	<a href="#">XPath</a> query string to get the parameter ( <i>XPath path definition only</i> )	
Text type	Which statistic to pick: mean value, std dev value.	

(\*) For a text-type descriptor, only one angle data or one point data can be added.