

z_all_flag:

Node1_ID ^a	Node2_ID ^b	Phase ^c	Meas_Type ^d	Accur_Type ^e	Sigma ^f
1	NaN	1	1	1	0.1
1	NaN	2	1	1	0.1
2	NaN	3	3	3	0
3	NaN	2	4	2	30

a – Node1_ID: is the ID of a Node measurement, or the ID of the first Node of a Branch measurement.

b – Node2_ID: is the ID of the second Node of a Branch measurement. This value is NaN for a Node measurement.

c – Phase: Phase of the measurement. One, two or three.

d – Meas_Type: Measurement Type. 1 – Voltage magnitude, 2 – Voltage angle, 3- Active power, 4 – Reactive power, 5 – Apparent power, 6 – Current.

e – Accur_Type: Accuracy Type. 1 – Real value, 2 – Pseudo value, 3 – Virtual values

f – Sigma: The standard deviation of the measurement.

z_all_data are the corresponding values. Each column is a new time step.

In the example above:

1 row – Real voltage magnitude measurement at Node_ID 1, phase 1 with a standard deviation of 0.1 V.

2 row – Real voltage magnitude measurement at Node_ID 1, phase 2 with a standard deviation of 0.1 V.

3 row – Virtual active power value at Node_ID 2, phase 3. (No standard deviation)

4 row – Pseudo reactive power value at Node_ID 3, phase 3 with a standard deviation of 30 var.

LineInfo

Name	Node1_ID	Flag_State1	Node2_ID	Flag_State2	r	x	c	r0_r1	x0_x1	c0	l
'L1'	1	1	2	1	0.3264	0.3557	0	4	4	0	1

Node1_ID and Node2_ID are the IDs of the Nodes connected by the line (branch)

Flag_State1 and Flag_State2 defines if the line is open on any side. '1' means closed, '0' opened.

r is the series resistance in direct components per unit length in Ohm/km

x is the series reactance (inductive) in direct components per unit length in Ohm/km

c is the shunt capacitance in direct components per unit length in nF/km

r0_r_1 is the zero to direct component ratio of the series resistance in pu

x0_x1 is the zero to direct component ratio of the series reactance (inductive) in pu

c0 is the shunt capacitance in zero components per unit length in nF/km

l is the line length in km