```
Initial Parameters...
R(load) = 500 \text{ ohms}
r = 1.00
w = 0.50
_____
INITIAL Particle 1 :: pos(duty) = 0.42283562 fitness(Output Power) = 11.38361871
INITIAL Particle 2 :: pos(duty) = 0.54787090 fitness(Output Power) = 18.62429944
INITIAL Particle 3 :: pos(duty) = 0.94273698 fitness(Output Power) = 48.66797866
______
_____
Iteration No: 1
c1 = 0.41774410 c2 = 0.98305247
velocity =
   0.5111
   0.3882
        0
Particle 1 :: pos(duty) = 0.93392594 fitness(Output Power) = 64.79860234
Particle 2 :: pos(duty) = 0.93604498 fitness(Output Power) = 60.71161790
Particle 3 :: pos(duty) = 0.94273698 fitness(Output Power) = 48.66797866
Updated best Fitness Position = 0.93392594
Iteration No: 2
c1 = 0.30145495 c2 = 0.70109876
velocity =
   0.2555
   0.1926
  -0.0062
Particle 1 :: pos(duty) = 0.95000000 fitness(Output Power) = 37.11431295
Particle 2 :: pos(duty) = 0.95000000 fitness(Output Power) = 37.11431295
Particle 3 :: pos(duty) = 0.93655957 fitness(Output Power) = 59.73072029
Updated best Fitness Position = 0.93392594
Iteration No: 3
c1 = 0.66633885 c2 = 0.53912647
velocity =
   0.1084
   0.0783
  -0.0045
```

```
Particle 1 :: pos(duty) = 0.95000000
                                        fitness(Output Power) = 37.11431295
Particle 2 :: pos(duty) = 0.95000000
                                        fitness(Output Power) = 37.11431295
             pos(duty) = 0.93205100
Particle 3 ::
                                        fitness(Output Power) = 68.55847153
Updated best Fitness Position = 0.93205100
_____
Iteration No: 4
c1 = 0.69810552 c2 = 0.66652791
velocity =
   0.0310
   0.0175
  -0.0023
Particle 1 :: pos(duty) = 0.98101303 fitness(Output Power) = 5.34099878
Particle 2 :: pos(duty) = 0.96746240 fitness(Output Power) = 15.69598509
Particle 3 :: pos(duty) = 0.92979672 fitness(Output Power) = 73.13543267
Updated best Fitness Position = 0.92979672
-----
Iteration No: 5
c1 = 0.17813245 c2 = 0.12801440
velocity =
   0.0006
  -0.0017
  -0.0011
Particle 1 :: pos(duty) = 0.98157538 fitness(Output Power) = 5.01399893
                                       fitness(Output Power) = 17.38548059
Particle 2 :: pos(duty) = 0.96577539
Particle 3 ::
             pos(duty) = 0.92866958
                                     fitness(Output Power) = 75.53273639
Updated best Fitness Position = 0.92866958
Iteration No: 6
c1 = 0.99908039 c2 = 0.17112107
velocity =
  -0.0564
  -0.0369
  -0.0006
Particle 1 :: pos(duty) = 0.92519763 fitness(Output Power) = 83.05059809
Particle 2 :: pos(duty) = 0.92887923 fitness(Output Power) = 75.09687200
Particle 3 :: pos(duty) = 0.92810601 fitness(Output Power) = 76.73134101
```

Updated best Fitness Position = 0.87877873

Updated best Fitness Position = 0.92519763 _____ Iteration No: 7 c1 = 0.03260082 c2 = 0.56119979velocity = -0.0282 -0.0205 -0.0019 pos(duty) = 0.89700876 Particle 1 :: fitness(Output Power) = 155.20262359 Particle 2 :: pos(duty) = 0.90836504 fitness(Output Power) = 124.39685893 Particle 3 :: pos(duty) = 0.92619204 fitness(Output Power) = 80.87168493 Updated best Fitness Position = 0.89700876 Iteration No: 8 c1 = 0.88186650 c2 = 0.66917530velocity = -0.0141 -0.0179 -0.0205 Particle 1 :: pos(duty) = 0.88291433 fitness(Output Power) = 179.67486688 Particle 2 :: pos(duty) = 0.89050860 fitness(Output Power) = 170.41020011 pos(duty) = 0.90570633 Particle 3 :: fitness(Output Power) = 131.55888580 Updated best Fitness Position = 0.88291433 _____ Iteration No: 9 c1 = 0.19043327 c2 = 0.36891655velocity = -0.0070 -0.0117 -0.0187 Particle 1 :: pos(duty) = 0.87586711 fitness(Output Power) = 178.57632475 Particle 2 :: pos(duty) = 0.87877873 fitness(Output Power) = 179.98211972 Particle 3 :: pos(duty) = 0.88705513 fitness(Output Power) = 176.02189553

```
_____
Iteration No: 10
c1 = 0.46072594 c2 = 0.98163795
velocity =
   0.0026
  -0.0059
  -0.0175
Particle 1 :: pos(duty) = 0.87844850
                                        fitness(Output Power) = 179.88138424
Particle 2 :: pos(duty) = 0.87291380 fitness(Output Power) = 176.15621678
Particle 3 :: pos(duty) = 0.86960510 fitness(Output Power) = 172.61550491
Updated best Fitness Position = 0.87877873
_____
Iteration No: 11
c1 = 0.15640495 c2 = 0.85552281
velocity =
   0.0016
   0.0030
   0.0019
Particle 1 :: pos(duty) = 0.88002172 fitness(Output Power) = 180.20307316
Particle 2 :: pos(duty) = 0.87591622
                                       fitness(Output Power) = 178.60535123
             pos(duty) = 0.87145761 fitness(Output Power) = 174.67785864
Particle 3 ::
Updated best Fitness Position = 0.88002172
Iteration No: 12
c1 = 0.64476454 c2 = 0.37627221
velocity =
   0.0008
   0.0049
   0.0142
Particle 1 :: pos(duty) = 0.88080833 fitness(Output Power) = 180.20952570
Particle 2 :: pos(duty) = 0.88080786 fitness(Output Power) = 180.20952570
Particle 3 :: pos(duty) = 0.88566302 fitness(Output Power) = 177.64618809
Updated best Fitness Position = 0.88080833
Iteration No: 13
c1 = 0.19092370 c2 = 0.42825299
velocity =
```

```
0.0004
   0.0024
   0.0050
Particle 1 :: pos(duty) = 0.88120163
                                        fitness(Output Power) = 180.17205628
Particle 2 ::
             pos(duty) = 0.88325388
                                        fitness(Output Power) = 179.50544617
Particle 3 :: pos(duty) = 0.89068669 fitness(Output Power) = 170.03977348
Updated best Fitness Position = 0.88080833
_____
Iteration No: 14
c1 = 0.48202206 c2 = 0.12061161
velocity =
  -0.0000
  -0.0003
  -0.0011
                                        fitness(Output Power) = 180.17617297
Particle 1 :: pos(duty) = 0.88116126
Particle 2 :: pos(duty) = 0.88300289 fitness(Output Power) = 179.63445042
Particle 3 :: pos(duty) = 0.88958556 fitness(Output Power) = 172.12369317
Updated best Fitness Position = 0.88080833
Iteration No: 15
c1 = 0.58950748 c2 = 0.22618768
velocity =
  -0.0003
  -0.0019
  -0.0048
Particle 1 :: pos(duty) = 0.88085319
                                        fitness(Output Power) = 180.20740922
Particle 2 :: pos(duty) = 0.88108703 fitness(Output Power) = 180.18744860
Particle 3 :: pos(duty) = 0.88473733 fitness(Output Power) = 178.50511155
Updated best Fitness Position = 0.88080833
Iteration No: 16
c1 = 0.38461912
                  c2 = 0.58298638
velocity =
  -0.0002
  -0.0012
  -0.0047
```

```
Particle 1 :: pos(duty) = 0.88065574
                                        fitness (Output Power) = 180.21730934
             pos(duty) = 0.87985924
Particle 2 ::
                                        fitness(Output Power) = 180.18739780
Particle 3 :: pos(duty) = 0.88002266 fitness(Output Power) = 180.20307316
Updated best Fitness Position = 0.88065574
_____
Iteration No: 17
c1 = 0.25180612 c2 = 0.29044066
velocity =
  -0.0001
  -0.0001
  -0.0022
Particle 1 :: pos(duty) = 0.88055702 fitness(Output Power) = 180.21971674
Particle 2 :: pos(duty) = 0.87971555 fitness(Output Power) = 180.17115987
              pos(duty) = 0.87784919
Particle 3 ::
                                       fitness(Output Power) = 179.65472229
Updated best Fitness Position = 0.88055702
_____
Iteration No: 18
c1 = 0.61709088 c2 = 0.26528091
velocity =
  1.0e-03 *
  -0.0494
   0.8254
   0.9728
Particle 1 :: pos(duty) = 0.88050766 fitness(Output Power) = 180.22013808
Particle 2 :: pos(duty) = 0.88054099 fitness(Output Power) = 180.21971674
Particle 3 :: pos(duty) = 0.87882202 fitness(Output Power) = 179.99215899
Updated best Fitness Position = 0.88050766
_____
Iteration No: 19
c1 = 0.82437627
                 c2 = 0.98266340
velocity =
  -0.0000
   0.0004
   0.0031
Particle 1 :: pos(duty) = 0.88048297
                                        fitness(Output Power) = 180.22036773
```

```
Particle 2 :: pos(duty) = 0.88092095 fitness(Output Power) = 180.20262175
Particle 3 :: pos(duty) = 0.88195462 fitness(Output Power) = 180.02125983
Updated best Fitness Position = 0.88048297
Iteration No: 20
c1 = 0.73024879 c2 = 0.34387700
velocity =
  1.0e-03 *
  -0.0123
  -0.2381
  -0.3506
Particle 1 :: pos(duty) = 0.88047063 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88068285 fitness(Output Power) = 180.21612797
              pos(duty) = 0.88160404
Particle 3 ::
                                       fitness(Output Power) = 180.10256456
Updated best Fitness Position = 0.88047063
_____
Iteration No: 21
c1 = 0.58406933 c2 = 0.10776902
velocity =
  -0.0000
  -0.0002
  -0.0012
Particle 1 :: pos(duty) = 0.88046446
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045808 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88038297 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88046446
Iteration No: 22
c1 = 0.90630815 c2 = 0.87965372
velocity =
  1.0e-03 *
  -0.0031
  -0.1068
  -0.5388
Particle 1 :: pos(duty) = 0.88046138 fitness(Output Power) = 180.22040503
```

```
Particle 2 :: pos(duty) = 0.88035131
                                       fitness(Output Power) = 180.21935595
Particle 3 :: pos(duty) = 0.87984412 fitness(Output Power) = 180.18739780
Updated best Fitness Position = 0.88046138
Iteration No: 23
c1 = 0.81776056 c2 = 0.26072800
velocity =
  1.0e-03 *
  -0.0015
   0.0626
   0.3322
Particle 1 :: pos(duty) = 0.88045984 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88041393 fitness(Output Power) = 180.22024928
              pos(duty) = 0.88017628 fitness(Output Power) = 180.21369650
Particle 3 ::
Updated best Fitness Position = 0.88045984
_____
Iteration No: 24
c1 = 0.59435625 c2 = 0.02251259
velocity =
  1.0e-03 *
  -0.0008
   0.0586
   0.2953
Particle 1 :: pos(duty) = 0.88045906 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88047252 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88047159 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045906
_____
Iteration No: 25
c1 = 0.42525932 c2 = 0.31271889
velocity =
  1.0e-03 *
  -0.0004
   0.0251
   0.1437
```

```
Particle 1 :: pos(duty) = 0.88045868
                                         fitness(Output Power) = 180.22040503
             pos(duty) = 0.88049760
Particle 2 ::
                                        fitness (Output Power) = 180.22036773
Particle 3 :: pos(duty) = 0.88061533
                                        fitness(Output Power) = 180.21830170
Updated best Fitness Position = 0.88045868
_____
Iteration No: 26
c1 = 0.16148474 c2 = 0.17876619
velocity =
  1.0e-04 *
  -0.0019
   0.0153
   0.2065
Particle 1 :: pos(duty) = 0.88045849
                                        fitness (Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88049913 fitness(Output Power) = 180.22036773
Particle 3 :: pos(duty) = 0.88063598 fitness(Output Power) = 180.21830170
Updated best Fitness Position = 0.88045849
Iteration No: 27
c1 = 0.42288569 c2 = 0.09422934
velocity =
  1.0e-04 *
  -0.0010
  -0.1432
  -0.7592
Particle 1 :: pos(duty) = 0.88045839 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88048481 fitness(Output Power) = 180.22036773
Particle 3 :: pos(duty) = 0.88056006 fitness(Output Power) = 180.21971674
Updated best Fitness Position = 0.88045839
Iteration No: 28
c1 = 0.59852367
                  c2 = 0.47092426
velocity =
  1.0e-03 *
  -0.0000
```

```
-0.0270
  -0.1388
Particle 1 :: pos(duty) = 0.88045834 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045785 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88042127 fitness(Output Power) = 180.22024928
Updated best Fitness Position = 0.88045834
_____
Iteration No: 29
c1 = 0.69594931 c2 = 0.69988785
velocity =
  1.0e-04 *
  -0.0002
  -0.1314
  -0.0843
Particle 1 :: pos(duty) = 0.88045832 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88044471
                                       fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88041284 fitness(Output Power) = 180.22024928
Updated best Fitness Position = 0.88045832
_____
Iteration No: 30
c1 = 0.63853076 c2 = 0.03360384
velocity =
  1.0e-04 *
  -0.0001
  -0.0611
   0.3483
Particle 1 :: pos(duty) = 0.88045831 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88043860
                                       fitness(Output Power) = 180.22024928
             pos(duty) = 0.88044767 fitness(Output Power) = 180.22040503
Particle 3 ::
Updated best Fitness Position = 0.88045831
_____
Iteration No: 31
c1 = 0.06880610 c2 = 0.31959974
velocity =
  1.0e-04 *
```

```
-0.0001
   0.0366
   0.2081
Particle 1 :: pos(duty) = 0.88045830
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88044226 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88046848 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045830
_____
Iteration No: 32
c1 = 0.53086428 c2 = 0.65444571
velocity =
  1.0e-04 *
  -0.0000
   0.1233
   0.0374
Particle 1 :: pos(duty) = 0.88045830 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045459 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88047222 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045830
_____
Iteration No: 33
c1 = 0.40761920 c2 = 0.81998122
velocity =
  1.0e-05 *
  -0.0002
   0.9204
  -0.9548
Particle 1 :: pos(duty) = 0.88045829
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88046379 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88046268 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 34
c1 = 0.71835894 c2 = 0.96864933
velocity =
```

Iteration No: 37

```
1.0e-05 *
  -0.0001
  -0.0723
  -0.9018
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88046307 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045366 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
_____
Iteration No: 35
c1 = 0.53133391 c2 = 0.32514568
velocity =
  1.0e-05 *
  -0.0000
  -0.1914
  -0.3002
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88046115
                                        fitness(Output Power) = 180.22040503
             pos(duty) = 0.88045066
Particle 3 ::
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 36
c1 = 0.10562920 c2 = 0.61095866
velocity =
  1.0e-05 *
  -0.0000
  -0.2705
   0.3165
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045845 fitness(Output Power) = 180.22040503
Particle 3 ::
             pos(duty) = 0.88045382 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
```

```
c1 = 0.77880224 c2 = 0.42345292
velocity =
  1.0e-05 *
  -0.0000
  -0.1419
   0.3476
Particle 1 :: pos(duty) = 0.88045829
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045703
                                        fitness(Output Power) = 180.22040503
                                        fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045730
Updated best Fitness Position = 0.88045829
_____
Iteration No: 38
c1 = 0.09082329
                  c2 = 0.26647149
velocity =
  1.0e-05 *
  -0.0000
  -0.0373
   0.2003
             pos(duty)=
Particle 1 ::
                           0.88045829
                                        fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045666 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045930 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 39
c1 = 0.15365672 c2 = 0.28100530
velocity =
  1.0e-06 *
  -0.0000
   0.2731
   0.7184
                          0.88045829 fitness(Output Power) = 180.22040503
Particle 1 ::
             pos(duty)=
Particle 2 :: pos(duty) = 0.88045693 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88046002
                                       fitness(Output Power) = 180.22040503
```

Updated best Fitness Position = 0.88045829

```
_____
Iteration No: 40
c1 = 0.44008514 c2 = 0.52714274
velocity =
  1.0e-06 *
  -0.0000
   0.8546
  -0.5508
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045779
                                        fitness(Output Power) = 180.22040503
              pos(duty) = 0.88045947
Particle 3 ::
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
_____
Iteration No: 41
c1 = 0.45742437 c2 = 0.87537160
velocity =
  1.0e-05 *
  -0.0000
   0.0872
  -0.1304
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045866 fitness(Output Power) = 180.22040503
             pos(duty) = 0.88045816
Particle 3 ::
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
_____
Iteration No: 42
c1 = 0.51805211 c2 = 0.94362262
velocity =
  1.0e-06 *
  -0.0000
   0.0923
  -0.5306
Particle 1 :: pos(duty) = 0.88045829
                                        fitness(Output Power) = 180.22040503
             pos(duty) = 0.88045875
Particle 2 ::
                                        fitness(Output Power) = 180.22040503
             pos(duty) = 0.88045763 fitness(Output Power) = 180.22040503
Particle 3 ::
```

Updated best Fitness Position = 0.88045829

```
_____
Iteration No: 43
c1 = 0.63770910
                   c2 = 0.95769394
velocity =
  1.0e-06 *
  -0.0000
  -0.3909
   0.3663
Particle 1 ::
             pos(duty)=
                           0.88045829
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045836
                                         fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045800
                                         fitness (Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 44
c1 = 0.24070704 c2 = 0.67612230
velocity =
  1.0e-06 *
  -0.0000
  -0.2397
   0.3814
Particle 1 ::
             pos(duty) = 0.88045829
                                         fitness (Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045812 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045838
                                        fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 45
c1 = 0.28906457
                   c2 = 0.67180817
velocity =
  1.0e-06 *
  -0.0000
  -0.0028
   0.1314
Particle 1 ::
             pos(duty) = 0.88045829
                                         fitness(Output Power) = 180.22040503
                                         fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045812
Particle 3 :: pos(duty) = 0.88045851
                                         fitness(Output Power) = 180.22040503
```

Updated best Fitness Position = 0.88045829 _____ Iteration No: 46 c1 = 0.69514050 c2 = 0.06799277velocity = 1.0e-07 * -0.0000 0.1064 0.5079 Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503 Particle 2 :: pos(duty) = 0.88045813 fitness(Output Power) = 180.22040503 Particle 3 :: pos(duty) = 0.88045856 fitness(Output Power) = 180.22040503 Updated best Fitness Position = 0.88045829 _____ Iteration No: 47 c1 = 0.25479016 c2 = 0.22404003velocity = 1.0e-07 * -0.0000 0.4260 -0.3519 Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503 Particle 2 :: pos(duty) = 0.88045817 fitness(Output Power) = 180.22040503 Particle 3 :: pos(duty) = 0.88045853 fitness(Output Power) = 180.22040503 Updated best Fitness Position = 0.88045829 Iteration No: 48 c1 = 0.66783273 c2 = 0.84439216velocity = 1.0e-06 * -0.0000 0.1258 -0.2162 Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503 Particle 2 :: pos(duty) = 0.88045830 fitness(Output Power) = 180.22040503

```
Particle 3 :: pos(duty) = 0.88045831 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
_____
Iteration No: 49
c1 = 0.34446241 c2 = 0.78051965
velocity =
  1.0e-06 *
  -0.0000
   0.0613
  -0.1230
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045836 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045819 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
Iteration No: 50
c1 = 0.67533207 c2 = 0.00671531
velocity =
  1.0e-07 *
  -0.0000
   0.3024
  -0.6078
Particle 1 :: pos(duty) = 0.88045829 fitness(Output Power) = 180.22040503
Particle 2 :: pos(duty) = 0.88045839 fitness(Output Power) = 180.22040503
Particle 3 :: pos(duty) = 0.88045813 fitness(Output Power) = 180.22040503
Updated best Fitness Position = 0.88045829
-----
>>
```