```
Initial Parameters...
R(load) = 500 \text{ ohms}
r = 1.00
w = 0.50
_____
                                          fitness(Output Power) = 24.91191014
INITIAL Particle 1 :: pos(duty) = 0.57102587
INITIAL Particle 2 :: pos(duty) = 0.17685506 fitness(Output Power) = 10.64447425
INITIAL Particle 3 :: pos(duty) = 0.95738402 fitness(Output Power) = 26.70493560
______
_____
Iteration No: 1
c1 = 0.26532204 c2 = 0.92458090
velocity =
   0.1429
   0.2887
       0
Particle 1 :: pos(duty) = 0.71391362 fitness(Output Power) = 50.40439394
Particle 2 :: pos(duty) = 0.46551993 fitness(Output Power) = 17.91242412
Particle 3 :: pos(duty) = 0.95738402 fitness(Output Power) = 26.70493560
Updated best Fitness Position = 0.71391362
Iteration No: 2
c1 = 0.22377040 c2 = 0.37356381
velocity =
   0.0714
   0.1814
  -0.0364
Particle 1 :: pos(duty) = 0.78535749 fitness(Output Power) = 82.01614752
Particle 2 :: pos(duty) = 0.64696872 fitness(Output Power) = 31.65212326
Particle 3 :: pos(duty) = 0.92100333 fitness(Output Power) = 92.63524620
Updated best Fitness Position = 0.92100333
Iteration No: 3
c1 = 0.08750035 c2 = 0.64011655
velocity =
   0.0705
   0.1609
  -0.0182
```

```
Particle 1 :: pos(duty) = 0.85581109
                                        fitness(Output Power) = 153.71605220
Particle 2 :: pos(duty) = 0.80785875
                                        fitness(Output Power) = 99.33598333
             pos(duty) = 0.90281298
Particle 3 ::
                                        fitness(Output Power) = 139.14522282
Updated best Fitness Position = 0.85581109
_____
Iteration No: 4
c1 = 0.18061689 c2 = 0.04505111
velocity =
   0.0352
   0.0813
  -0.0099
Particle 1 :: pos(duty) =
                          0.89103788 fitness(Output Power) = 169.32982308
Particle 2 :: pos(duty)=
                         0.88916789 fitness(Output Power) = 172.54591014
Particle 3 :: pos(duty) = 0.89287082 fitness(Output Power) = 165.37582175
Updated best Fitness Position = 0.88916789
Iteration No: 5
c1 = 0.72317348 c2 = 0.34743765
velocity =
   0.0174
   0.0407
  -0.0055
Particle 1 :: pos(duty) = 0.90839140 fitness(Output Power) = 124.12685935
              pos(duty) = 0.92982246
                                        fitness(Output Power) = 73.02646158
Particle 2 ::
Particle 3 ::
             pos(duty) = 0.88738512 fitness(Output Power) = 175.38478286
Updated best Fitness Position = 0.88738512
Iteration No: 6
c1 = 0.66061682 c2 = 0.38386860
velocity =
   0.0009
   0.0031
  -0.0027
Particle 1 :: pos(duty) = 0.90925709 fitness(Output Power) = 121.96529349
Particle 2 :: pos(duty) = 0.93289076 fitness(Output Power) = 66.48784007
Particle 3 :: pos(duty) = 0.88464227 fitness(Output Power) = 178.43901243
```

Updated best Fitness Position = 0.88101732

Updated best Fitness Position = 0.88464227 _____ Iteration No: 7 c1 = 0.62734650 c2 = 0.02164981velocity = -0.0044 -0.0099 -0.0014 Particle 1 :: pos(duty) = 0.90490487 fitness(Output Power) = 133.27502142 Particle 2 :: pos(duty) = 0.92303533 fitness(Output Power) = 87.73461369 Particle 3 :: pos(duty) = 0.88327084 fitness(Output Power) = 179.39724479 Updated best Fitness Position = 0.88327084 Iteration No: 8 c1 = 0.91056999 c2 = 0.80055866velocity = -0.0142 -0.0300 -0.0007 Particle 1 :: pos(duty) = 0.89075029 fitness(Output Power) = 169.74903457 Particle 2 :: pos(duty) = 0.89303862 fitness(Output Power) = 164.91881989 pos(duty) = 0.88258513 fitness(Output Power) = 179.81169973 Particle 3 :: Updated best Fitness Position = 0.88258513 _____ Iteration No: 9 c1 = 0.74584748 c2 = 0.81311281velocity = -0.0097 -0.0196 -0.0003 Particle 1 :: pos(duty) = 0.88101732 fitness(Output Power) = 180.19084688 Particle 2 :: pos(duty) = 0.87348553 fitness(Output Power) = 176.68027529 Particle 3 :: pos(duty) = 0.88224227 fitness(Output Power) = 179.92015731

```
_____
Iteration No: 10
c1 = 0.38330632 c2 = 0.61727923
velocity =
  -0.0049
  -0.0079
  -0.0005
Particle 1 :: pos(duty) = 0.87615084
                                        fitness(Output Power) = 178.82705206
Particle 2 :: pos(duty) = 0.86556867 fitness(Output Power) = 168.25745543
Particle 3 :: pos(duty) = 0.88176839 fitness(Output Power) = 180.01287527
Updated best Fitness Position = 0.88101732
_____
Iteration No: 11
c1 = 0.57549486 c2 = 0.53005170
velocity =
  -0.0003
   0.0011
  -0.0004
Particle 1 :: pos(duty) = 0.87586965 fitness(Output Power) = 178.82705206
Particle 2 :: pos(duty) = 0.86670812
                                       fitness(Output Power) = 169.21479793
             pos(duty) = 0.88137221 fitness(Output Power) = 180.14881493
Particle 3 ::
Updated best Fitness Position = 0.88101732
Iteration No: 12
c1 = 0.27506976 c2 = 0.24862896
velocity =
   0.0009
   0.0027
  -0.0002
Particle 1 :: pos(duty) = 0.87680739
                                        fitness(Output Power) = 179.30226694
Particle 2 :: pos(duty) = 0.86944662 fitness(Output Power) = 172.54202137
Particle 3 :: pos(duty) = 0.88113882 fitness(Output Power) = 180.14881493
Updated best Fitness Position = 0.88101732
Iteration No: 13
c1 = 0.45163877 c2 = 0.22771283
velocity =
```

```
0.0016
   0.0032
  -0.0001
Particle 1 :: pos(duty) = 0.87842027
                                         fitness (Output Power) = 179.93966906
             pos(duty) = 0.87259944
Particle 2 ::
                                        fitness (Output Power) = 176.20566917
Particle 3 :: pos(duty) = 0.88101106 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
_____
Iteration No: 14
c1 = 0.80444958 c2 = 0.98610424
velocity =
   0.0027
   0.0052
  -0.0001
Particle 1 :: pos(duty) = 0.88108677
                                         fitness(Output Power) = 180.14881493
Particle 2 :: pos(duty) = 0.87778134 fitness(Output Power) = 179.67072353
Particle 3 :: pos(duty) = 0.88094965 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
Iteration No: 15
c1 = 0.02999195 c2 = 0.53566419
velocity =
   0.0013
   0.0033
  -0.0000
Particle 1 :: pos(duty) = 0.88240432
                                        fitness(Output Power) = 179.81169973
Particle 2 :: pos(duty) = 0.88106565
                                      fitness(Output Power) = 180.14881493
Particle 3 :: pos(duty) = 0.88093345 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
Iteration No: 16
c1 = 0.08707722
                   c2 = 0.80209144
velocity =
   0.0002
   0.0016
   0.0000
```

```
Particle 1 :: pos(duty) = 0.88256978
                                         fitness(Output Power) = 179.81169973
             pos(duty) = 0.88269230
Particle 2 ::
                                        fitness (Output Power) = 179.68804741
Particle 3 :: pos(duty) = 0.88095226 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
_____
Iteration No: 17
c1 = 0.98914491 c2 = 0.06694626
velocity =
  1.0e-03 *
  -0.5731
   0.1249
   0.0111
Particle 1 :: pos(duty) = 0.88199670
                                        fitness (Output Power) = 180.01287527
Particle 2 :: pos(duty) = 0.88281717 fitness(Output Power) = 179.68804741
Particle 3 :: pos(duty) = 0.88096340 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
Iteration No: 18
c1 = 0.93939836 c2 = 0.01817753
velocity =
  1.0e-03 *
  -0.6617
  -0.6088
   0.0060
Particle 1 :: pos(duty) = 0.88133503 fitness(Output Power) = 180.14881493
Particle 2 :: pos(duty) = 0.88220837
                                       fitness(Output Power) = 179.92015731
Particle 3 :: pos(duty) = 0.88096937
                                        fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88101732
Iteration No: 19
c1 = 0.68383861
                  c2 = 0.78373648
velocity =
  1.0e-03 *
  -0.5173
```

```
-0.9904
   0.0180
Particle 1 :: pos(duty) = 0.88081769 fitness(Output Power) = 180.19084688
                                       fitness(Output Power) = 180.14881493
Particle 2 :: pos(duty) = 0.88121801
Particle 3 :: pos(duty) = 0.88098738 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88081769
_____
Iteration No: 20
c1 = 0.53413757 c2 = 0.88535945
velocity =
  1.0e-03 *
  -0.2587
  -0.6370
  -0.0511
Particle 1 :: pos(duty) = 0.88055902 fitness(Output Power) = 180.21475826
Particle 2 :: pos(duty) = 0.88058106 fitness(Output Power) = 180.21475826
Particle 3 :: pos(duty) = 0.88093630 fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88055902
_____
Iteration No: 21
c1 = 0.89900490 c2 = 0.62593763
velocity =
  1.0e-03 *
  -0.1293
  -0.3240
  -0.1200
Particle 1 :: pos(duty) = 0.88042969 fitness(Output Power) = 180.21475826
Particle 2 :: pos(duty) = 0.88025706
                                       fitness(Output Power) = 180.21989981
Particle 3 ::
             pos(duty) = 0.88081629
                                        fitness(Output Power) = 180.19084688
Updated best Fitness Position = 0.88025706
_____
Iteration No: 22
c1 = 0.13786899 c2 = 0.21780159
velocity =
  1.0e-03 *
```

```
-0.0797
  -0.1620
  -0.1087
Particle 1 :: pos(duty) = 0.88034998
                                        fitness (Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88009507
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88070757 fitness(Output Power) = 180.21475826
Updated best Fitness Position = 0.88034998
_____
Iteration No: 23
c1 = 0.18214108 c2 = 0.04181986
velocity =
  1.0e-04 *
  -0.3985
  -0.7673
  -0.6034
Particle 1 :: pos(duty) = 0.88031013 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88001833 fitness(Output Power) = 180.20559914
Particle 3 :: pos(duty) = 0.88064723 fitness(Output Power) = 180.21475826
Updated best Fitness Position = 0.88031013
_____
Iteration No: 24
c1 = 0.10694166 c2 = 0.61644349
velocity =
  1.0e-03 *
  -0.0199
   0.0369
  -0.1133
Particle 1 :: pos(duty) = 0.88029020
                                        fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88005520 fitness(Output Power) = 180.20559914
Particle 3 :: pos(duty) = 0.88053394 fitness(Output Power) = 180.21475826
Updated best Fitness Position = 0.88029020
Iteration No: 25
c1 = 0.93966101 c2 = 0.35445573
velocity =
```

```
1.0e-04 *
  -0.0996
   0.6674
  -0.9120
Particle 1 :: pos(duty) = 0.88028024 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88012194 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88044273 fitness(Output Power) = 180.21475826
Updated best Fitness Position = 0.88028024
_____
Iteration No: 26
c1 = 0.41062909 c2 = 0.98434942
velocity =
  1.0e-03 *
  -0.0050
   0.0957
  -0.1096
Particle 1 :: pos(duty) = 0.88027526 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88021764
                                       fitness(Output Power) = 180.21989981
             pos(duty) = 0.88033315 fitness(Output Power) = 180.21989981
Particle 3 ::
Updated best Fitness Position = 0.88027526
Iteration No: 27
c1 = 0.94557919 c2 = 0.67664468
velocity =
  1.0e-04 *
  -0.0249
   0.6345
  -0.7046
Particle 1 :: pos(duty) = 0.88027277 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88028108 fitness(Output Power) = 180.21989981
Particle 3 ::
             pos(duty) = 0.88026269 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027277
Iteration No: 28
```

```
c1 = 0.98830226
                  c2 = 0.76683139
velocity =
  1.0e-04 *
  -0.0125
   0.2917
  -0.3214
Particle 1 :: pos(duty) = 0.88027152
                                         fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88031025
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88023055
                                        fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027152
_____
Iteration No: 29
c1 = 0.33669926
                  c2 = 0.66238186
velocity =
  1.0e-05 *
  -0.0623
   0.4324
  -0.5215
Particle 1 ::
             pos(duty)=
                           0.88027090
                                         fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88031458
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88022534
                                         fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027090
Iteration No: 30
c1 = 0.24416529 c2 = 0.29550725
velocity =
  1.0e-05 *
  -0.0311
  -0.3001
   0.2778
                           0.88027059 fitness(Output Power) = 180.21989981
Particle 1 ::
             pos(duty)=
Particle 2 :: pos(duty) = 0.88031158 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88022812
                                        fitness(Output Power) = 180.21989981
```

Updated best Fitness Position = 0.88027059

```
_____
Iteration No: 31
c1 = 0.68017837 c2 = 0.52784683
velocity =
  1.0e-04 *
  -0.0016
  -0.1015
   0.1036
Particle 1 :: pos(duty) = 0.88027043 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88030142
                                        fitness(Output Power) = 180.21989981
                          0.88023847
Particle 3 ::
              pos(duty)=
                                        fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027043
_____
Iteration No: 32
c1 = 0.41159351 c2 = 0.60263822
velocity =
  1.0e-04 *
  -0.0008
  -0.1255
   0.1288
Particle 1 :: pos(duty) = 0.88027035 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88028887 fitness(Output Power) = 180.21989981
             pos(duty) = 0.88025136
Particle 3 ::
                                        fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027035
-----
Iteration No: 33
c1 = 0.75052006
                 c2 = 0.58353317
velocity =
  1.0e-04 *
  -0.0004
  -0.1060
   0.1088
Particle 1 :: pos(duty) = 0.88027032
                                        fitness(Output Power) = 180.21989981
              pos(duty) = 0.88027828
Particle 2 ::
                                        fitness (Output Power) = 180.21989981
             pos(duty) = 0.88026223 fitness(Output Power) = 180.21989981
Particle 3 ::
```

Updated best Fitness Position = 0.88027032

```
_____
Iteration No: 34
c1 = 0.55179251
                   c2 = 0.58357062
velocity =
  1.0e-05 *
  -0.0019
  -0.7157
   0.7325
Particle 1 ::
              pos(duty)=
                           0.88027030
                                         fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027112
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88026956 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027030
Iteration No: 35
c1 = 0.51181992 c2 = 0.08259273
velocity =
  1.0e-05 *
  -0.0010
  -0.3606
   0.3687
Particle 1 ::
             pos(duty)=
                           0.88027029
                                         fitness(Output Power) = 180.21989981
                                         fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88026752
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027324
Updated best Fitness Position = 0.88027029
Iteration No: 36
c1 = 0.71957013
                   c2 = 0.99615611
velocity =
  1.0e-06 *
  -0.0049
  -0.6987
   0.6654
Particle 1 ::
             pos(duty) = 0.88027028
                                         fitness(Output Power) = 180.21989981
                                         fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88026682
Particle 3 :: pos(duty) = 0.88027391
                                         fitness(Output Power) = 180.21989981
```

Updated best Fitness Position = 0.88027028 _____ Iteration No: 37 c1 = 0.35453430 c2 = 0.97125882velocity = 1.0e-05 * -0.0002 0.0997 -0.1076 Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88026781 fitness(Output Power) = 180.21989981 Particle 3 :: pos(duty) = 0.88027283 fitness(Output Power) = 180.21989981 Updated best Fitness Position = 0.88027028 _____ Iteration No: 38 c1 = 0.34644876 c2 = 0.88654386velocity = 1.0e-05 * -0.0001 0.1373 -0.1444 Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88026919 fitness(Output Power) = 180.21989981 Particle 3 :: pos(duty) = 0.88027139 fitness(Output Power) = 180.21989981 Updated best Fitness Position = 0.88027028 Iteration No: 39 c1 = 0.45469486 c2 = 0.41342729velocity = 1.0e-06 * -0.0006 0.8669 -0.9054 Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88027005 fitness(Output Power) = 180.21989981

```
Particle 3 :: pos(duty) = 0.88027048 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
_____
Iteration No: 40
c1 = 0.21773207 c2 = 0.12565459
velocity =
  1.0e-06 *
  -0.0003
   0.4447
  -0.4631
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027050 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027002 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
Iteration No: 41
c1 = 0.30891459 c2 = 0.72610443
velocity =
  1.0e-06 *
  -0.0002
   0.1582
  -0.1569
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027066 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88026986 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
Iteration No: 42
c1 = 0.78287207 c2 = 0.69378761
velocity =
  1.0e-07 *
  -0.0008
  -0.2614
   0.3635
```

```
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027063 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88026990
                                        fitness (Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
_____
Iteration No: 43
c1 = 0.00980225 c2 = 0.84321334
velocity =
  1.0e-06 *
  -0.0000
  -0.1322
   0.1454
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027050
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027005 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
Iteration No: 44
c1 = 0.92233200 c2 = 0.77095422
velocity =
  1.0e-06 *
  -0.0000
  -0.1343
   0.1442
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027036 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027019 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
Iteration No: 45
c1 = 0.04265986 c2 = 0.37818614
velocity =
  1.0e-07 *
  -0.0001
  -0.8026
```

1.0e-08 *

0.8535 Particle 1 :: pos(duty) = 0.88027028 fitness (Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 3 :: pos(duty) = 0.88027027 fitness(Output Power) = 180.21989981 Updated best Fitness Position = 0.88027028 Iteration No: 46 c1 = 0.70433962 c2 = 0.72951305velocity = 1.0e-07 * -0.0000 -0.4204 0.4333 Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88027024 fitness(Output Power) = 180.21989981 Particle 3 :: pos(duty) = 0.88027032 fitness(Output Power) = 180.21989981 Updated best Fitness Position = 0.88027028 Iteration No: 47 c1 = 0.22427707 c2 = 0.26905473velocity = 1.0e-07 *-0.0000 -0.1720 0.1724 Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981 Particle 2 :: pos(duty) = 0.88027022 fitness(Output Power) = 180.21989981 Particle 3 :: pos(duty) = 0.88027034 fitness(Output Power) = 180.21989981 Updated best Fitness Position = 0.88027028 _____ Iteration No: 48 c1 = 0.67303117 c2 = 0.47749220velocity =

-0.0001

```
0.1464
  -0.2522
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027023
                                        fitness(Output Power) = 180.21989981
Particle 3 ::
             pos(duty) = 0.88027033
                                        fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
_____
Iteration No: 49
c1 = 0.62371641 c2 = 0.23644493
velocity =
  1.0e-08 *
  -0.0001
   0.5577
  -0.6540
Particle 1 :: pos(duty) = 0.88027028 fitness(Output Power) = 180.21989981
Particle 2 :: pos(duty) = 0.88027023 fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027033 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
_____
Iteration No: 50
c1 = 0.17712375 c2 = 0.82964339
velocity =
  1.0e-07 *
  -0.0000
   0.1794
  -0.1962
Particle 1 :: pos(duty) = 0.88027028
                                        fitness(Output Power) = 180.21989981
             pos(duty) = 0.88027025
Particle 2 ::
                                        fitness(Output Power) = 180.21989981
Particle 3 :: pos(duty) = 0.88027031 fitness(Output Power) = 180.21989981
Updated best Fitness Position = 0.88027028
_____
>>
```