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## Conversion of measurements $W/m^2$ to $MJ/day$

To begin, 1 Watt = 1 joule/second

So, 1  $w/m^2$  = 1  $J/m^2/second$

You need to include the time factor which is your logging interval to convert each  $W/m^2$  reading to  $J/m^2/(time\ interval)$

E.g. For a logging interval of 30 minutes = 1800 seconds

$X\ W/m^2 = X \times 1800\ J/m^2/30minutes$

There are 48 x 30 minute readings in a 24 hour period, these should be added together to give a single reading of  $J/m^2/day$ . To convert to  $MJ/m^2/day$  then divide by  $10^6$  (or 1,000,000)

So in summary,

1. Multiply  $W/m^2$  reading by the logging periods in seconds
2. Add all readings for a 24 hour period
3. Divide the total by  $10^6$  to obtain  $MJ/m^2/day$