

## **Canon 800D/18-55 IS STM power consumption test**

These are some power consumption measurements I took on my Canon 800D, in order to get an idea of how long it'll run on a stock battery, as well as my giant home made 40 Wh battery grip. Feel free to use and adapt this data for any purpose.

Tests were performed with a bench power supply set to 8 V. The mode dial was set to Tv. AF/IS is left on in all tests, but the camera was left stationary and focusing on a static object - except for the handheld tests, where I waved it around to give the AF/IS some work to do.

Measurements were taken as averages over a few seconds for most tests, and longer intervals for the timelapse tests. The averaging functionality of a Brymen BM869 multimeter was used to derive the results. A pretty crude jig, so as always with tests like this, your mileage may vary.

In timelapse mode, the lens AF/IS settings seem to make no appreciable difference on the power consumption, given that the camera is stationary. Neither does the metering mode (1st frame/every frame).

The memory card used was a 64 GB Sandisk Extreme UHS-3.

The camera was purchased in August 2017, and running firmware version 1.0.1.ME

The peak current measured while the flash was charging was about 1,3 A.

A "new battery" is specified as 7,5 Wh LP-E17.

<https://youtube.com/user/FFcossag>

Mode of operation	Current draw (mA)	Power consumption (W)	Runtime on a new battery (h)	Runtime on a 40 Wh pack (h)
<b>STILLS</b>				
On (shooting screen)	120	0,96	7,81	41,67
On (screen off)	42	0,34	22,32	119,05
Screen off/Metering	122	0,98	7,68	40,98
Handheld metering	170	1,36	5,51	29,41
Fast cont. shooting	550	4,40	1,70	9,09
Cont. Flash shooting	990	7,92	0,95	5,05
Live view	320	2,56	2,93	15,63
On (wifi)	255	2,04	3,68	19,61
Live view (wifi)	365	2,92	2,57	13,70
Browsing images	210	1,68	4,46	23,81
Browsing menu	210	1,68	4,46	23,81
<b>VIDEO</b>				
On, 25P	325	2,60	2,88	15,38
On, 50P	418	3,34	2,24	11,96
On (handheld), 25P	351	2,81	2,67	14,25
On (handheld), 50P	446	3,57	2,10	11,21
On (wifi), 25P	373	2,98	2,51	13,40
On (wifi), 50P	467	3,74	2,01	10,71
Watching 25P video	244	1,95	3,84	20,49
Watching 50P video	258	2,06	3,63	19,38
Live view to HDMI 25P	312	2,50	3,00	16,03
Live view to HDMI 50P	405	3,24	2,31	12,35
<b>RECORDING TESTS</b>				
1080p/50	469	3,75	2,00	10,66
1080p/25	356	2,85	2,63	14,04
720p/50	439	3,51	2,14	11,39
720p/25	338	2,70	2,77	14,79
VGA/25STD	324	2,59	2,89	15,43
VGA/25LIGHT	322	2,58	2,91	15,53
<b>RECORDING TESTS WITH WIFI</b>				
1080p/50 (wifi)	517	4,14	1,81	9,67
1080p/25 (wifi)	401	3,21	2,34	12,47
720p/50 (wifi)	494	3,95	1,90	10,12
720p/25 (wifi)	386	3,09	2,43	12,95
VGA/25STD (wifi)	376	3,01	2,49	13,30
VGA/25LIGHT (wifi)	375	3,00	2,50	13,33
<b>TIMELAPSE</b>				
<b>1080p/25, autoexp. each frame, AF/IS on, average current over a few minutes</b>				
Timelapse 1s/scr on	319	2,55	2,94	15,67
Timelapse 1s/scr off	291	2,33	3,22	17,18
Timelapse 10s/scr off	187	1,50	5,01	26,74
Timelapse 30s/scr off	133	1,06	7,05	37,59
Timelapse idle/scr off	104	0,83	9,01	48,08