1. - Default for e-bike up to 35kg and 3000W of power (PAS with cadence sensor only) **Sabvoton 72045**
2. - Default for e-bike up to 35kg and 3000W of power (PAS with torque sensor BB) **Sabvoton 72045**
3. - Default for e-bike up to 35kg and 3000W of power (PAS with torque sensor BB) **Kelly KLS4812S**
4. - Default for heavy e-bikes (~70kg) and 10000W of power (PAS with cadence sensor only) **Sabvoton 72150**
5. - Default for heavy e-bikes (~55kg) and 6000W of power (PAS with torque sensor BB) **Sabvoton ML60**

No.	Name in MPeV6 SET app	Name in MaxiColor 850C display	Unit	1.	2.	3.	4.	5.	Allowable range	Description
-	DIST	Odometer	km / mi	0	0	0	0	0	0-65000	Defining the current total mileage. Useful when installing MPe on a used vehicle for which we know its mileage so far.
-	NC	No. of batt. charge cycles	Ah*count	0	0	0	0	0	0-65000	Defining the current number of battery charging cycles. Useful when you install MPe to a used vehicle for which you know the number of battery charging cycles so far. For example: our battery has 20Ah and 150 charging cycles, this gives 20 * 150 = 3000. We enter the value: 3000.
		Battery and current sensor / 1-9								
1	1_BATCAP_AH	1. Battery capacity Ah	Ah*10	192	192	192	440	440	1-65000	Battery capacity in Ah (ampere-hours). This value can be measured with MPe or calculated. Example 1 - measured by MPe. We fully charge the battery and then ride e-bike to discharge it. MPe shows, when the battery is fully discharged, the consumption is 19.2Ah, that is 19.2 * 10 = 192. We enter the value: 192. Example 2 - Calculated. One cell has 3.5Ah, we have a battery in which there are 7 cells connected in parallel, this gives 7 * 3.5 = 24.5Ah. We assume that our battery is 85% of its nominal capacity, this gives 24.5 * 0.85 * 10 = 208.25, then we enter 208. Important: The battery in an electric vehicle will never be at 100% capacity from the cell label. Usually it is 70-95%.
2	2_BATCAP_WH	2. Battery capacity Wh	Wh	1114	1114	1114	3190	3190	1-65000	Battery capacity in Wh (watt hours). This value can be measured with MPe or calculated. Example 1 - measured by MPe. We fully charge the battery and then ride e-bike to discharge it. MPe shows consumption of 1114Wh when the battery is fully discharged. We enter the value 1114. Example 2 Calculated for a Li-ion battery. The average cell voltage is 3.625V. Our battery has a 16S (sections) and 19.2Ah (ampere hours), that is 16 * 3.625 * 19.2 = 1113.6Wh. We enter the value 1114.
3	3_LVC	3. Low voltage cutoff	V*10	480	480	480	600	600	300-999	Voltage at which MPe will cut off the drive. Most often it is the voltage of a fully discharged battery. Enter a voltage such that MPe will disconnect the drive first, before the BMS does. For example: a discharged battery is 49V, which gives 49 * 10 = 490. We enter the value 490.
4	4_FULL_BATT_V	4. Full battery voltage	V*10	665	665	665	835	835	300-999	Voltage of a fully charged battery after the balancing cycle is completed. For example: a charged battery is 66.5V, this gives 66.5 * 10 = 665, then we enter 665. It is important for correct operation of battery level indicator
5	5_MVPERA	5. Current resolution mV/A	mV/A	10	10	10	10	10	1-200	Resolution of operation of the installed current sensor. The standard MPe ACS758200B sensor has a resolution of 10mV / A.
6	6_CURDIR	6. Current measure direction	0/1	1	1	1	1	1	0/1	The current sensor in MPe is bidirectional and, depending on the connection, can show the current at + or -. We want the + sign to be displayed during discharge, and the - sign of the measured current during charging or regenerative braking. If the measured current is opposite to the expected value, then we enter the value opposite to the one entered now, i.e. if it is 0 then we will enter 1, and if it is 1 we will enter 0.
7	7_VOL_DIV	7. Voltage divider ratio	-	33058	33058	33058	33058	33058	1-65000	If the battery voltage value shown by MPe is not consistent with the actual state, we can correct the indication by changing this parameter. For example: MPe shows V_MPe = 66.5V and voltmeter / multimeter shows V_multimeter = 66.9V. Then we read the currently entered configuration parameter 7_VOL_DIV and substitute it into the equation: (V_multimeter * 7_VOL_DIV) / V_MPe = X, i.e. in this case (66.9 * 33058) /66.5=33256. We enter the value: 33256.
8	8_CUR_SENSOR_OK	8. Disable current sens. check	0/1	0	0	0	0	0	0/1	MPe has a built-in protection against false readings from a damaged current sensor. It is activated when: 1.The throttle signal is given, which should cause an increase in power, and the power does not increase for 1 second (it will also appear when we have the drive wheel raised), 2.The current indication will exceed 200A for 1 second (by default, the current sensor supports 200A). We can disable this protection. Then enter the value: 1. By default, the protection is enabled (value 0).
9	9_CUR_PROTECT	9. Negative current protection	A	2	2	2	20	20	1-30	MPe has a built-in protection against incorrect direction of the current sensor operation, set in parameter 6_CURDIR. This is to prevent the PAS assist power from tending to infinity. MPe will cut off the drive if the current indication is negative and lower than the value set in this parameter (-2A by default). Occasionally, on installations with regenerative braking, a value that is too low (close to zero) will result in a delayed reaction time on the thumb throttle after applying regenerative braking. Then this parameter can be increased (reasonably) to max. 20-30A.
		Throttle / 13-18, 130-144								
13	13_TOT_MIN	13. Throttle out min.	V*100	85	85	85	80	85	80-120	The minimum voltage at the output of the thumb throttle signal to the controller. Example: 1.0V * 100 = 100, then we enter 100. Too high value may cause the controller to work unintendedly and the motor to run.
14	14_TOT_MAX	14. Throttle out max.	V*100	350	350	400	420	350	300-500	Maximum voltage at the output of the thumb throttle signal to the controller. Example: 3.5V * 100 = 350, then we enter 350 Most often drivers do not increase the power above 3.5V. If we set too high a value here the controller will cut off the drive.
15	15_TIN_MIN	15. Throttle in min.	V*100	90	90	100	90	90	0-120	The minimum voltage at the signal input of the thumb throttle. We enter value rounded up to next tenth. Example: the value of the thumb throttle at rest, measured with a multimeter, is 0.9V, it gives 0.9 * 100 = 90, then we enter 100. This value can also be read directly on the MPe device. Set this parameter value too low may cause the PAS to stop working.
16	16_TIN_MAX	16. Throttle in max.	V*100	360	360	360	360	370	300-500	Maximum voltage at the signal input of the thumb throttle. We enter value rounded up to next tenth. Example: the value of the thumb throttle twisted at 100% measured with a multimeter is 4.25V, this gives 4.25 * 100 = 425, then we enter 435. This value can also be read directly on the MPe device.
17	17_THR_RESET	17. Throttle reset on/off	0/1	1	1	1	1	1	0/1	When the value of this parameter is 1, then when stationary we have set the throttle and brake at the same time, the vehicle will not start until we completely release the throttle and apply it again. It is a protection against undesirable "pulling forward" of the vehicle with high power, during eg stop at traffic lights and inadvertent operation of the thumb throttle while holding the brake.
18	18_THR_SAFE_VOL	18. Throttle safe voltage	V*100	370	370	370	370	370	300-500	The throttle voltage above which MPe will cut off the drive. It is a protection against a damaged thumb throttle or its faulty connection. For MPeV5 motherboard, the default is 450 [V * 100], and for MPeV6 motherboard, the default is 370 [V * 100]
		Speed reading / 25-28								
25	25_KPHMPH	25. Unit kph / mph	0/1	0	0	0	0	0	0/1	Speed readout in SI units (km / h) or imperial (mph). SI = 0, IMP = 1.
26	26_PERIMETER	26. Wheel perimeter	mm	2160	2160	2160	2050	2050	1-9999	Wheel circumference expressed in millimeters [mm].
27	27_MOT_MAG	27. No. of speed sensor magnets	pcs.	46	46	46	32	32	1-999	When using a hall sensor from a motor, it is the number of magnets in the motor (not the number of pairs / poles). When using a reed switch and a magnet / sensor on the spokes, enter the value = 1.
28	28_GEAR_RATIO	28. Gear ratio	n*10	10	10	10	10	10	1-999	If we have the speed taken from the hall sensor in the motor, and the ratio of the motor to the wheel is not 1: 1, then we can set the gear here. Example 1: for hub gearless motors the gear ratio is 1: 1, then 1 * 10 = 10. We enter the value: 10. Example 2: the motor has a gear ratio of 7.2: 1, this gives 7.2 * 10 = 72, then we enter 72.
34	34_BT_BUTTONS	--	0/1	0	0	0	0	0	0/1	When we use MPe only in the smartphone version (without any display), then we set this parameter to 1. Accidentally setting this parameter to 1, when using the MiniOled display, will prevent entering the statistics screens (simultaneous, momentary pressing of the upper and lower buttons at once).

No.	Name in MPeV6 SET app	Name in MaxiColor 850C display	Unit	1.	2.	3.	4.	5.	Allowable range	Description
		Brake sensor / 35								
35	35_EBRAKEHILO	35. Direction NO / NC	0/1	0	0	0	0	0	0/1	Selection of the type of brake sensor. For GND operation 0 = normally open (when we do not have the brake handle pressed the sensor is open), 1 = normally closed (when we do not have the brake handle pressed the sensor is shorted). For 12V operation values are opposite.
		Temperature reading / 40-44								
40	40_TEMPCTEMPF	40. Unit *C / *F	0/1	0	0	0	0	0	0/1	Temperature reading in degrees Celsius (*C = 0) or in degrees Fahrenheit (*F = 1).
41	41_TEMPTYPE1	41. Temp. 1 type	0/1/2/3/4	0	0	0	4	4	0/1/2/3/4	Here we select the type of temperature sensor connected to the T1 port. 0 = LM35, 1 = NTC10k, 2 = KTY83, 3 = NTC10k single wire (common ground with hall, D switch ON), 4 = KTY83 single wire (common ground with hall, D switch ON).
42	42_TEMPTYPE2	42. Temp. 2 type	0/1/2/3/4	0	0	0	0	0	0/1/2/3/4	Here we select the type of temperature sensor connected to the T2 port. 0 = LM35, 1 = NTC10k, 2 = KTY83
43	43_OVHT1	43. Temp. 1 overheat limit	*C / *F	140	140	140	140	140	1-150	Temperature of T1 sensor, when exceeded MPe will cut off the drive.
44	44_OVHT2	44. Temp. 2 overheat limit	*C / *F	60	60	60	60	60	1-150	Temperature of T2 sensor, when exceeded MPe will cut off the drive.
		PID reg. and cr. control / 50-65								
50	50_P_POWER	50. Coefficient P	-	150	150	350	190	200	1-999	P, I, D components of the PID controller responsible for setting power and maintaining it at the appropriate level. These apply to PAS assist, cruise control and throttle in mode 1 = power limit. Mainly these parameters, incorrectly selected, are responsible for the "waving" power setting when using the PAS, cruise control or throttle, working in mode 1 = power limit. The slow PID controller becomes active when the input power deviates from the power setpoint less than the threshold set in 56_PID_L_THR. It is worth checking the PID settings in the various suggested configurations, because the same settings work differently in different vehicles.
51	51_I_POWER	51. Coefficient I	-	80	80	180	100	70	1-999	
52	52_D_POWER	52. Coefficient D	-	50	50	150	80	140	1-999	
53	53_P_LOW	53. Coefficient slow P	-	0	0	0	0	50	1-999	
54	54_I_LOW	54. Coefficient slow I	-	0	0	0	0	30	1-999	
55	55_D_LOW	55. Coefficient slow D	-	0	0	0	0	50	1-999	
56	56_PID_L_THR	56. Slow PID threshold	W	0	0	0	0	300	0-200	Input power difference threshold to the set power, below which the Slow PID controller is activated. By default, the Slow PID controller is disabled = 0.
59	59_SPEEDFACTORMIN	59. Speed factor PAS min.	%	1	1	1	1	1	1-100	Power factor for max speed for PID controller. After reaching the maximum speed for a given PAS assist level, the PID controller reduces the power to x% of the power. For example: for the current PAS assist level, the preset power is 250W, the maximum speed is 25 km / h, and the speed factor is 1%. After exceeding the speed of 25 km / h, the PID regulator will reduce the power to 1%, which in this case to 2.5W.
60	60_PIDPWMMAX	60. PAS PID PWM out max.	-	200	200	200	70	200	150-255	Maximum PWM signal that the PID controller can accept. Responsible for the maximum voltage at the output of the throttle signal to the controller. We keep this value to a minimum so as not to give the PID controller too much food for thought.
61	61_SPD_FACTOR_RAMP_UP	61. Speed factor ramp up	W/s	50	50	40	30	50	1-300	The ramp up speed of the speed factor value for the PID controller, for PAS support and cruise control. In order to keep the speed at a given level, we have to react to the power set by the PID controller in order not to accelerate the vehicle too much. Therefore, we reduce the power from 100% to X% set in the 59_SPEEDFACTORMIN parameter. The commencement of the reduction of power begins after exceeding the speed by 5 km / h lower than the set speed for a given assist level. With the parameter 61_SPD_FACTOR_RAMP_UP we define how rapidly the power change is to take place depending on the speed close to the threshold.
62	62_CR_CTRL_PWR_MIN	62. Cruise ctrl. power min.	W	240	240	240	240	240	100-300	Cruise control minimum power.
63	63_CR_CTRL_PWR_MAX	63. Cruise ctrl. power max.	W	1300	1300	1300	2000	1300	700-2000	Cruise control maximum power.
64	64_CR_CTRL_PWR_RAMP	64. Cruise ctrl. power ramp up	W/s	300	300	300	260	300	50-500	Cruise control powerramp up speed.
65	65_CR_CTRL_MAX_SPD	65. Cruise ctrl. max. speed	kph / mph	40	40	40	40	40	30-50	Maximum cruise control speed. Default = 0, which means cruise control disabled. Do not exceed 50 km / h because above it may not run smoothly. At the moment of switching on the cruise control, MPe checks what speed has been set and linearly determines the dependence of the cruise control power on the set speed. The current speed in relation to the range from 0 km / h to the speed set in the 65_CR_CTRL_MAX_SPD parameter sets the coefficient that sets the cruise control power linearly in the power range from that set in the 62_CR_CTRL_PWR_MIN parameter to the one set in 63_CR_CTRL_PWR_MAX. If we set: power min. to 0, max power at 1000, max speed at 50 km / h and we will turn on the cruise control at 25 km / h, then MPe will set the speed coefficient for the cruise control in the middle of the set speed range. This will translate into half the power of the set values, i.e. in this case 500W (25km / h is 50% of the set speed of 50km / h and this gives 50% of the set power between 0W and 1000W).
		Pedal assist PAS / 70-126								
70	70_AUTOLIMIT	70. Auto limit mode on/off	0/1	1	1	1	1	1	0/1	When this parameter is activated, MPe will always turn on in the locked mode (power and speed limitation to those set in parameters 72_LIMIT_SPEED and 73_LIMIT_POWER). Additionally, the thumb throttle does not work in locked mode.
71	71_LIMIT_ON_OFF	71. Limit mode on/off	0/1	1	1	1	1	1	0/1	Here we set whether MPe is in the locked mode (power and speed limitation set in parameters 72_LIMIT_SPEED and 73_LIMIT_POWER). Additionally, the thumb throttle does not work in locked mode. 0 = unlocked mode, 1 = locked mode. In the MiniOled display, there is a shortcut to switch between Locked and Unlocked modes. Press the brake lever and the lower button simultaneously for one second. In the MaxiColor display, there is a shortcut to switch between locked and unlocked modes. Press the minus (-) button and the on / off switch (o) for one second.
72	72_LIMIT_SPEED	72. Limit mode max. speed	kph / mph	25	25	25	25	28	1-99	Locked mode speed limit.
73	73_LIMIT_POWER	73. Limit mode max. power	W	250	250	250	250	350	1-1000	Locked mode power limit.
74	74_PASMAGNETS	74. No. of PAS magnets	pcs.	12	36	36	12	36	2-50	Number of magnets in the PAS sensor.
75	75_PWR_LIM_PAS_1	75. Power of assist 1	W	100	5	5	500	5	1-3000	PAS assist power for a given assist level. In locked mode, this value will be limited if it is greater than the one set in 73_LIMIT_POWER. For crank torque sensor allowable values for power multiplication are from 1 to 20. Entering value above 20 will be recognized as willingness of usage of cadence sensor only. Values in range 1-20 multiplicator of human power for crank torque sensor and cadence pedal assist. Values in range 21-3500 - power limit in watts for cadence only pedal assist.
76	76_PWR_LIM_PAS_2	76. Power of assist 2		175	10	10	700	10		
77	77_PWR_LIM_PAS_3	77. Power of assist 3		250	15	15	900	15		
78	78_PWR_LIM_PAS_4	78. Power of assist 4		350	20	20	1100	20		
79	79_PWR_LIM_PAS_5	79. Power of assist 5		600	400	1000	1100	1100		
80	80_SPD_LIM_PAS_1	80. Speed limit of assist 1	kph / mph	20	41	50	20	55	10-45	PAS speed limit for a given assist level. In locked mode, this value will be limited if it is greater than the one set in 72_LIMIT_SPEED.
81	81_SPD_LIM_PAS_2	81. Speed limit of assist 2		25	41	50	25	55		
82	82_SPD_LIM_PAS_3	82. Speed limit of assist 3		25	41	50	30	55		
83	83_SPD_LIM_PAS_4	83. Speed limit of assist 4		30	41	50	35	55		
84	84_SPD_LIM_PAS_5	84. Speed limit of assist 5		38	32	35	35	37		
85	85_MIN_SPD_PAS_1	85. Min. speed of assist 1	kph / mph	0	13	0	0	0	0-10	Minimum vehicle speed above which PAS assist activates. If you want to disable PAS support for a given assist level, enter a high starting speed, e.g. 999.
86	86_MIN_SPD_PAS_2	86. Min. speed of assist 2		0	0	0	0	0		
87	87_MIN_SPD_PAS_3	87. Min. speed of assist 3		0	0	0	0	0		
88	88_MIN_SPD_PAS_4	88. Min. speed of assist 4		0	0	0	0	0		
89	89_MIN_SPD_PAS_5	89. Min. speed of assist 5		0	3	3	0	3		

No.	Name in MPeV6 SET app	Name in MaxiColor 850C display	Unit	1.	2.	3.	4.	5.	Allowable range	Description
90	90_CAD_MIN_PAS_1	90. Min. cadence of assist 1	rpm	0	0	0	0	0	2-30	The minimum cadence (crank rotation speed) above which PAS assistance activates. The power of PAS assistance increases linearly between the minimum and maximum cadence until the power set for a given assist level is reached.
91	91_CAD_MIN_PAS_2	91. Min. cadence of assist 2		0	0	0	0	0		
92	92_CAD_MIN_PAS_3	92. Min. cadence of assist 3		0	0	0	0	0		
93	93_CAD_MIN_PAS_4	93. Min. cadence of assist 4		0	0	0	0	0		
94	94_CAD_MIN_PAS_5	94. Min. cadence of assist 5		0	0	0	0	0		
95	95_CAD_MAX_PAS_1	95. Max. cadence of assist 1	rpm	10	10	10	10	10	10-120	Maximum cadence (crank speed) beyond which the power of the PAS assistance will no longer increase. The power of PAS assistance increases linearly between the minimum and maximum cadence until the power set for a given assist level is reached.
96	96_CAD_MAX_PAS_2	96. Max. cadence of assist 2		10	10	10	10	10		
97	97_CAD_MAX_PAS_3	97. Max. cadence of assist 3		10	10	10	10	10		
98	98_CAD_MAX_PAS_4	98. Max. cadence of assist 4		10	10	10	10	10		
99	99_CAD_MAX_PAS_5	99. Max. cadence of assist 5		10	10	10	10	10		
100	100_RAMP_UP_PAS_1	100. PAS power ramp up 1	W/s	300	300	300	200	350	50-500	The ramp up speed of the set power for a given assist level. Too high a value may result in a perceptible power "ripple". Too low value may result in a long, slow acceleration of the vehicle.
101	101_RAMP_UP_PAS_2	101. PAS power ramp up 2		300	300	300	200	350		
102	102_RAMP_UP_PAS_3	102. PAS power ramp up 3		300	300	300	400	350		
103	103_RAMP_UP_PAS_4	103. PAS power ramp up 4		400	300	300	500	350		
104	104_RAMP_UP_PAS_5	104. PAS power ramp up 5		500	500	500	500	350		
105	105_BOOST_PWR_PAS_1	105. PAS boost power 1	W	500	500	500	2000	500	0-2500	PAS starting power. This is the power that will only be commanded in unlocked (not locked) mode for a certain amount of time. This power should be much greater than the continuous power for the particular assist level. This power helps to speed up the bike in the early stages of pedaling.This power will also be set while driving, when the cadence (crank rotational speed) from zero increases above zero, and the vehicle speed will be lower than that set in the following parameters (BOOST_SPEED_PAS).
106	106_BOOST_PWR_PAS_2	106. PAS boost power 2		500	500	500	2000	500		
107	107_BOOST_PWR_PAS_3	107. PAS boost power 3		750	800	800	2000	800		
108	108_BOOST_PWR_PAS_4	108. PAS boost power 4		800	800	800	2000	1100		
109	109_BOOST_PWR_PAS_5	109. PAS boost power 5		1000	800	1000	2000	1000		
110	110_BOOST_TIME_PAS_1	110. PAS boost time 1	ms	3500	500	500	3500	1500	0-10000	The time for which the initial power PAS BOOST will be commanded. This time is counted from the moment when the cadence (crank rotational speed) equal to zero increases above zero, and the vehicle speed is lower than that set in the following parameters (BOOST_SPEED_PAS).
111	111_BOOST_TIME_PAS_2	111. PAS boost time 2		3500	500	700	3500	2000		
112	112_BOOST_TIME_PAS_3	112. PAS boost time 3		3500	500	700	3500	2000		
113	113_BOOST_TIME_PAS_4	113. PAS boost time 4		3500	3500	700	3500	2000		
114	114_BOOST_TIME_PAS_5	114. PAS boost time 5		3500	3500	3500	3500	1500		
115	115_BOOST_SPEED_PAS_1	115. PAS boost max. speed 1	kph / mph	10	5	4	10	5	0-99	Vehicle speed above which the start power PAS BOOST will not activate.
116	116_BOOST_SPEED_PAS_2	116. PAS boost max. speed 2		10	5	8	10	25		
117	117_BOOST_SPEED_PAS_3	117. PAS boost max. speed 3		10	5	40	20	55		
118	118_BOOST_SPEED_PAS_4	118. PAS boost max. speed 4		22	5	40	27	55		
119	119_BOOST_SPEED_PAS_5	119. PAS boost max. speed 5		30	10	30	27	29		
120	120_BOOST_RAMP_UP_PAS	120. PAS boost ramp up	W/s	5000	5000	2500	5000	5000	10-5000	Ramp up speed of the increased initial power PAS BOOST.
121	121_CADENCE_REF_TIME	121. Cadence refresh time	ms	250	250	250	250	250	150-750	Cadence refresh time. The shorter the time, the sooner PAS assistance starts and ends. Too little time will result in jerking at low cadence. Too long will be reflected in the drive giving up power after you stop pedaling, for a noticeable moment.
122	122_TORQUE_S_ENABLE	122. Enable torque sensor	0/1	0	1	1	0	1		Set to 1 to activate connected torque sensor
123	123_START_MASS_PEDAL	123. Startup mass on pedal	kg*10	180	180	180	180	100	50-600	Threshold of force applied to pedal to engage motor, even before crank start to rotate.
124	124_TORQUE_S_ADC_MIN	124. Torque sensor ADC min.	-	320	320	330	320	325	0-1023	Calibration of torque sensor zero. Enter minimum ADC value (read from MPe display) incremented by 10
125	125_TORQUE_S_ADC_MAX	125. Torque sensor ADC max.	-	620	620	620	620	620	0-1023	Calibration of maximum ADC value corresponding to maximum torque that can be read by torque sensor. Enter max. ADC value read on MPe display.
126	126_TORQUE_S_KGF_MAX	126. Torque sensor kgF max.	kg*10	600	600	850	600	750	0-1000	Enter mass*10 applied to pedal by which the ADC max. value was read. (Mass above which ADC value have not increased anymore)
		Throttle / 13-18, 130-144								
130	130_PWR_LIM_THR_1	130. Throttle limit 1	W or %	1000	1000	1000	1000	60	0-1000W 0-100%	Limiting thumb throttle power for a given assist level. The value can be expressed in watts [W] or as a percentage [%]. If in the following parameters we select the operating mode of the thumb throttle as 1 = power limitation, then this parameter will be given in watts [W]. If in the following parameters we select the operating mode of the thumb throttle as 0 = standard / voltage, then this parameter will be given in percent [%]. The limitation in watts means that when we physically apply the thumb throttle “all the way”, MPe will send a signal truncated to the given xW to the output port of the lever. The percentage reduction means that when we physically set the thumb throttle to the limit, MPe will send a signal reduced to the given x% to the output port of the thumb throttle.
131	131_PWR_LIM_THR_2	131. Throttle limit 2		70	70	70	28	100		
132	132_PWR_LIM_THR_3	132. Throttle limit 3		90	90	90	35	100		
133	133_PWR_LIM_THR_4	133. Throttle limit 4		100	100	100	35	100		
134	134_PWR_LIM_THR_5	134. Throttle limit 5		100	100	100	100	100		
135	135_MODE_THR_1	135. Throttle mode 1	0/1 (% / power)	1	1	1	1	0	0/1	Thumb throttle operating mode, standard / voltage or power limited.0 = standard / voltage (that is, just like we would connect the thumb throttle directly to the controller).1 = power limitation. The MPe computer will ensure that the throttle has linear power to the one set in the PWR_LIM_THR parameter (in the limited power mode there is a slight delay in setting the power in relation to the throttle twist).
136	136_MODE_THR_2	136. Throttle mode 2		0	0	0	0	0		
137	137_MODE_THR_3	137. Throttle mode 3		0	0	0	0	0		
138	138_MODE_THR_4	138. Throttle mode 4		0	0	0	0	0		
139	139_MODE_THR_5	139. Throttle mode 5		0	0	0	0	0		
140	140_RAMP_UP_THR_1	140. Throttle ramp up 1	W/s or mV/s	1000	1000	1000	1000	3500	10-5000	The ramp up speed of power set by thumb throttle for a given assist level. In very strong ebikes, where the delicate twist of thumb throttle pulls the vehicle onto one wheel, setting a low value of this parameter will help in controlling the vehicle - it will give the effect of the so-called Soft-Start.
141	141_RAMP_UP_THR_2	141. Throttle ramp up 2		3000	3000	3000	300	5000		
142	142_RAMP_UP_THR_3	142. Throttle ramp up 3		3000	3000	3000	200	5000		
143	143_RAMP_UP_THR_4	143. Throttle ramp up 4		3000	3000	3000	200	5000		
144	144_RAMP_UP_THR_5	144. Throttle ramp up 5		3000	3000	3000	2000	5000		
999	n/a	n/a	rpm	0-150	0-150	0-150	0-150	0-150	present cadence	(only for MiniOled display) View the current cadence value (read only). Example: The value of 00050 is 50 crank RPM. With this parameter, we can confirm the correct connection of the PAS pedaling sensor. This parameter can help you determine the minimum and maximum cadence of PAS pedal assist (No. 85-98).
998	n/a	n/a	V*100	70-450	70-450	70-450	70-450	70-450	present thumb throttle voltage input	(only for MiniOled display) Preview of the current voltage at the input of the thumb throttle (read only) Example: the value of 00123 is 123/100, i.e. 1.23V. With this parameter, we can confirm that the thumb throttle is correctly connected to the TIN connectors. Here we can read the correct values to enter in the parameters No. 15_TIN_MIN and 16_TIN_MAX.
997	n/a	n/a	-	0-1023	0-1023	0-1023	0-1023	0-1023	torque sensor ADC	(only for MiniOled display) Preview of the current torque sensor ADC value (for torque sensor calibration and verification)
996	n/a	n/a	kgF (kg*10)	0-600	0-600	0-600	0-600	0-600	Weight on pedal	(only for MiniOled display) Preview of the current weight on pedal (for torque sensor calibration and verification)

0-PRESENT SPEED
1-DISTANCE TO GO
2-BATTERY LEVEL
3-TRIP
4-PRESENT POWER
5-TEMP 1
6-ASSIST LEVEL
7-ODOMETER
8-AVERAGE SPEED
9-MAX. SPEED
10-TIME IN MOTION
11-BATTERY VOLTAGE
12-PRESENT CURRENT
13-MAX. CURRENT
14-MAX. POWER
15-ENERGY CONSUMPTION
16-BATTERY CAPACITY
17-BATTERY USED Ah
18-TEMP 2
19-CHARGE CYCLES NO.
20-BRAKE STATUS
21-C.CONTROL STATUS
22-MPe VERSION
23-LIMIT MODE STATUS **<<== USER FIELDS OF MAINSCREEN NO. 2**
24-BATTERY USED Wh **<<== FOR MaxiColor 850C DISPLAY**
25-WARNING STATUS
26-CADENCE
27-THROTTLE IN VOLTAGE 28-TORQUE S. ADC 29-WEIGHT ON PEDAL