

KM003C/002C Protocol Trigger by Virtual Serial Port (Instructions)
Command List

Command	Description
pdm open	Start protocol trigger module
pdm close	Exit protocol trigger module
pdm set type=?,em=?	Customized PD protocol trigger type: PD protocol trigger type, 0: automatic, 1: PD3.0, 2: PD3.1, 3: Proprietary PPS (two types for now) em: Emarker/Cable simulation, 0: off, 1: 20V5A, 2: 50V5A (EPR), LA135 6.75A
entry pd	Enter the PD protocol trigger and some of the proprietary protocols (type=2)
entry ufcs	UFCS (Universal Fast Charging Specification)
entry qc	Qualcomm QC, including QC2.0/3.0, it'll automatically judge when triggered
entry fcp	FCP proprietary protocol
entry scp	SCP proprietary protocol
entry afc	AFC proprietary protocol
entry vfc	VFCP proprietary protocol
entry sfcp	SFCP proprietary protocol
reset	Reset protocol trigger, restore to initial state: pdm open after sending
qc ?V	Request fixed voltage of QC2.0 protocol Example: qc 5V, qc 9V, qc 12V, qc 20V
qc3 volt=?	Request any voltage of QC3.0, the minimum step is 200mV Range: 3600-20000 mV Example: qc3 volt=3800, qc3 volt=19800, qc3 volt=5000
qc3 inc=?	QC3.0 increases voltage Example: qc3 inc=8
qc3 dec=?	QC3.0 reduces voltage Example: qc3 dec=6
fcp ?V	Request fixed voltage of FCP protocol Example: fcp 5V, fcp 9V, fcp 12V
scp volt=?,cur=?	Request any voltage of SCP protocol, the minimum step is determined by the charger, the unit is mV Example: scp volt=11000,cur=5000
afc ?V	Request fixed voltage of AFC protocol Example: afc 5V, afc 9V, afc 12V
sfcp ?V	Request fixed voltage of SFCP protocol Example: sfcp 5V, sfcp 9V, sfcp 12V
vfc volt=?,cur=?	Request VFCP protocol Range: 7000-20000,0.01-6000 (the maximum value is

	determined by the charger)
	Example: vfcv volt=7100,cur=3000
ufcs req=?,volt=?,cur=?	Request any voltage of UFCS protocol, the range is determined by the charger
	Example: ufcs req=1, volt=11000, cur=4000
	ufcs req=2, volt=12000, cur=5000
ufcs pdo	Get Output_Capabilities value of UFCS charger
ufcs cmd=?	Send control commands, please refer to the number in Table 14 of the UFCS protocol manual
	range: ufcs cmd=6
ufcs data=?	not yet implemented
pd pdo	Get the SourceCapabilities in the PD protocol
pd req=?,cur=?	Request a fixed voltage without volt, if the cur value is not used, take the Max current of PDO
	req means ObjectPosition
	Example: req=2, cur=20000, req=3
pd req=?,volt=?,cur=?	If you need to request PPS or AVS, request the fixed voltage with volt. If it is a fixed voltage, ignore the volt value
	If the cur value is not used, take the Max current of PDO
	Example: req=5, volt=12000, cur=20000
	req=6, volt=20000
pd cmd=?	send control command
	Example: pd cmd=25
pd data=?	send data command
	The first byte represents SOP, the second/third represents the header, and does not contain CRC
	Example: Send a vdm command, pd data=008F5141A000FF992E0018181500000000000040400800
Since the PD protocol requires state machine, not all commands or data can be sent. And the internal counter is also determined by the state machine, so there is a difference between the header and the actual sent bytes. Only the data type and number of objects in the header are selected.	

Important Notice

1. If you're using Windows 7, please install the virtual serial port driver firstly.

<https://power-z.oss-cn-hongkong.aliyuncs.com/driver.exe>

Virtual serial port does not need to set Baud

After the driver is installed, the port with the POWERZ logo will be displayed.

2. If you're using Windows 10/11, you can use it without driver, but the port with the POWERZ logo will not be displayed.