

Vin pin can be powered with 3.3V /5V separately with PVIN when Vout is 6V~8V.

Theoretically speaking, Vin can be very low, close to 0V . But there is limitation on thermal and peak current limit. For example, considering the peak current limit 10A (min) and 80% eff, it can achieve Vin=1.5V, Vout=6.5V, Iout=1.6A. With Vin decrease, Iout decreases.