Quantity	cgs	Unit	=	SI	Unit	Note
Charge	1	$cm^{3/2} \cdot g^{1/2} \cdot s^{-1}$ (esu)	=	$3{,}3356 \cdot 10^{-10}$ [10/c (C/esu)]	$A \cdot s = C$	**|c|** = number for vacuum speed of light in cm/s
	$2{,}998 \cdot 10^{9}$ [c/10 (esu/C)]	esu	=	1		
Elementary charge e	$4{,}8033 \cdot 10^{-10}$	esu	=	$1{,}602 \cdot 10^{-19}$	$A \cdot s = C$	
Current I	1	$cm^{3/2} \cdot g^{1/2} \cdot s^{-2}$	=	$3{,}3356 \cdot 10^{-10}$ [10/c esu/A]	A	
Current density j=I/S	1	$cm^{-1/2} \cdot g^{1/2} \cdot s^{-2}$	=	$3{,}3356 \cdot 10^{-6}$ [10^{5}/c esu/(A/m^2)]	A/m^2	
Voltage U	1	$cm^{1/2} \cdot g^{1/2} \cdot s^{-1}$	=	$2{,}9979 \cdot 10^{2}$ [c/10^8 esu/V]	$m^2 \cdot kg \cdot s^{-3} \cdot A^{-1} = V$	
Electric field E=U/d	1	$cm^{-1/2} \cdot g^{1/2} \cdot s^{-1}$	=	$2{,}9979 \cdot 10^{4}$ [c/10^6 esu/(V/m)]	$m \cdot kg \cdot s^{-3} \cdot A^{-1} =$ V/m	
Conductivity σ =j/E	1	s^{-1}	=	$1{,}113 \cdot 10^{-10}$ [10^{11}/c^2 esu/(S/m)]	$m^{-3} \cdot kg^{-1} \cdot s^{3} \cdot A^{2} =$ S/m	
Mobility μ =v/E	1	$cm^{3/2} \cdot g^{-1/2}$	=	$3{,}3356 \cdot 10^{-7}$ [10^{4}/c esu/(m^2/(V·s))]	$kg^{-1} \cdot s^{2} \cdot A =$ $m^2/(V{\cdot}s)$	Usually use cm^2/V/s [10^8/c=1/300 esu/(cm^2/(V·s))]