

Energy Unit Conversion

TO → FROM ↓	$\lambda(\text{Å})$	$\lambda(\mu\text{m})$	$\lambda(\text{cm})$	$\nu(\text{Hz})$	E(keV)	WN(cm^{-1})	E(erg)
$\lambda(\text{Å})$	1	$10^{-4}\lambda$	$10^{-8}\lambda$	$3.00 \times 10^{18}/\lambda$	$12.4/\lambda$	$10^8/\lambda$	$1.99 \times 10^{-8}/\lambda$
$\lambda(\mu\text{m})$	$10^4\lambda$	1	$10^{-4}\lambda$	$3.00 \times 10^{14}/\lambda$	$1.24 \times 10^{-3}/\lambda$	$10^4/\lambda$	$1.99 \times 10^{-12}/\lambda$
$\lambda(\text{cm})$	$10^8\lambda$	$10^4\lambda$	1	$3.00 \times 10^{10}/\lambda$	$1.24 \times 10^{-7}/\lambda$	$1/\lambda$	$1.99 \times 10^{-16}/\lambda$
$\nu(\text{Hz})$	$3.00 \times 10^{18}/\nu$	$3.00 \times 10^{14}/\nu$	$3.00 \times 10^{10}/\nu$	1	$4.14 \times 10^{-18}\nu$	$3.34 \times 10^{-11}\nu$	$6.63 \times 10^{-27}\nu$
E(keV)	$12.4/E$	$1.24 \times 10^{-3}/E$	$1.24 \times 10^{-7}/E$	$2.42 \times 10^{17}E$	1	8.07×10^6E	$1.60 \times 10^{-9}E$
WN(cm^{-1})	$10^8/\text{WN}$	$10^4/\text{WN}$	$1/\text{WN}$	$3.00 \times 10^{10}\text{WN}$	$1.24 \times 10^{-7}\text{WN}$	1	$1.99 \times 10^{-16}\text{WN}$
E(erg)	$1.99 \times 10^{-8}/E$	$1.99 \times 10^{-12}/E$	$1.99 \times 10^{-16}/E$	$1.51 \times 10^{26}E$	6.24×10^8E	$5.03 \times 10^{15}E$	1

Flux Density Conversion

(E in keV; λ in Å)

TO → FROM ↓	$S_\nu(\text{Jy})$	$f_E \left(\frac{\text{photons}}{\text{cm}^2 \text{ s keV}} \right)$	$f_\lambda \left(\frac{\text{photons}}{\text{cm}^2 \text{ s Å}} \right)$	$F_\lambda \left(\frac{\text{ergs}}{\text{cm}^2 \text{ s Å}} \right)$	$F_\nu \left(\frac{\text{ergs}}{\text{cm}^2 \text{ s Hz}} \right)$
$S_\nu(\text{Jy})$	$S_\nu(\text{Jy})$	$1.51 \times 10^3 S_\nu/E$	$1.51 \times 10^3 S_\nu/\lambda$	$3.00 \times 10^{-5} S_\nu/\lambda^2$	$10^{-23} S_\nu$
$f_E \left(\frac{\text{photons}}{\text{cm}^2 \text{ s keV}} \right)$	$6.63 \times 10^{-4} E f_E$	f_E	$8.07 \times 10^{-2} E^2 f_E$	$1.29 \times 10^{-10} E^3 f_E$	$6.63 \times 10^{-27} E f_E$
$f_\lambda \left(\frac{\text{photons}}{\text{cm}^2 \text{ s Å}} \right)$	$6.63 \times 10^{-4} \lambda f_\lambda$	$8.07 \times 10^{-2} \lambda^2 f_\lambda$	f_λ	$1.99 \times 10^{-8} f_\lambda/\lambda$	$6.63 \times 10^{-27} \lambda f_\lambda$
$F_\lambda \left(\frac{\text{ergs}}{\text{cm}^2 \text{ s Å}} \right)$	$3.34 \times 10^4 \lambda^2 F_\lambda$	$4.06 \times 10^6 \lambda^3 F_\lambda$	$5.03 \times 10^7 \lambda F_\lambda$	F_λ	$3.34 \times 10^{-19} \lambda^2 F_\lambda$
$F_\nu \left(\frac{\text{ergs}}{\text{cm}^2 \text{ s Hz}} \right)$	$10^{23} F_\nu$	$1.51 \times 10^{26} F_\nu/E$	$1.51 \times 10^{26} F_\nu/\lambda$	$3.00 \times 10^{18} F_\nu/\lambda^2$	F_ν