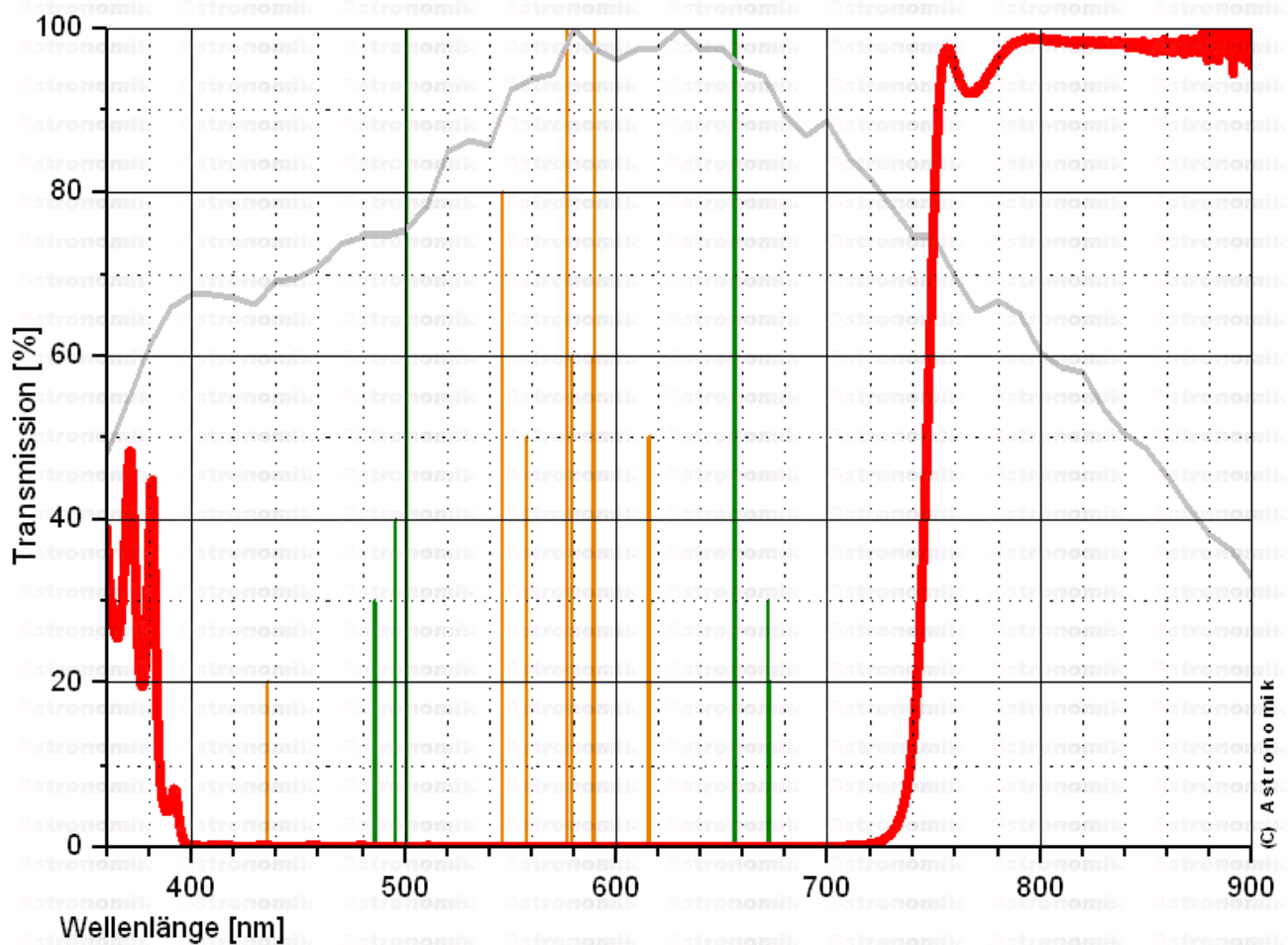


Transmission Curve Astronomik ProPlanet 742 IR Filter



How to read this chart?

- The **horizontal axis** is the **Wavelength in Nanometers (nm)**. 400nm is deep blue, at 520nm the human eye senses green and at 600nm red. At 656nm is the famous "H-Alpha" emission line of hydrogen.
- The **transmission in %** is plotted on the **vertical axis**.
- The **red line** shows the **transmission of the filter**.
- **Visual filters:** The **grey line** in the background shows the relative sensitivity of the human eye at night. The maximum is at ~510nm and drops to longer and shorter wavelengths. You can easily see, that you can't see anything of the H-alpha line at night (even if you can during daylight!) The sensitivity at 656nm is 0% at night!
- **Photographic filters:** The **grey line** in the background shows the sensitivity of a typical CCD sensor.
- The most important **artificial emission lines** are shown in **orange**. The artificial light pollution is dominated by see mercury (Hg) and sodium (Na), which are used in nearly all streetlights.
- The most important **emission lines from nebulae** are shown in **green**. The most important lines are from ionized Hydrogen (H-alpha and H-beta) and double ionized oxygen (OIII).

The major emission lines of artificial light pollution:

| Hg 435,8nm | Hg 546,1nm | Hg 577,0nm | Hg 578,1nm |
| Na 589,0nm | Na 589,6nm | Na 615,4nm | Na 616,1nm |

The major emission lines of nebulae:

H-β 486,1nm | OIII 495,9nm | OIII 500,7nm | H-α 656,3nm