GM2000HPS
Preview information

The **GM2000HPS** (**H**igh **P**recision and **S**peed) mount is an enhanced-performance version of the renowned **GM2000QCI** german equatorial mount by **10micron**.
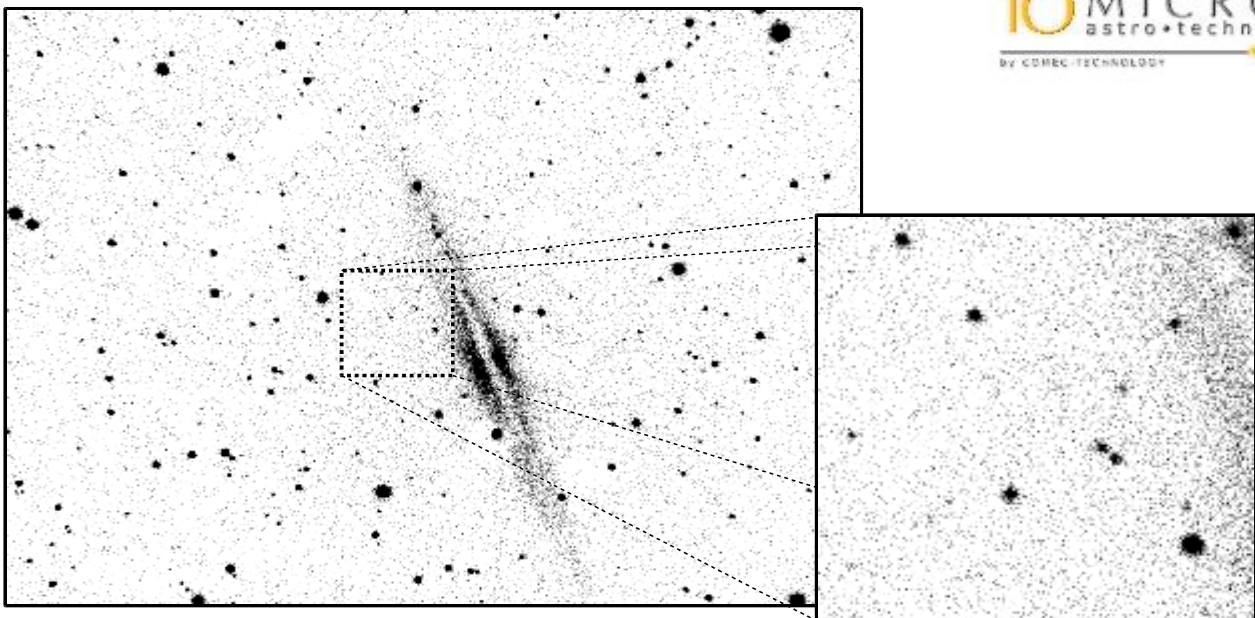
Boosted by an high-accuracy **absolute** resolver, the **GM2000HPS** provides absolute positioning, thus eliminating any need of homing or zeroing procedures. You will not lose your alignment by moving the mount by hand, releasing the clutches, even when the mount is unpowered, for example in case of power outages. This means **ease of use** when operating in the field, since the setup procedure is much faster. This means also **additional security** for remote operation, since there is absolutely no way you can lose your alignment, even in case of slippage.

The absolute resolver provides also high-accuracy, **sub-arcsecond tracking** feedback, eliminating the need of autoguiding in the vast majority of applications. The dual-axis tracking function ensures correct tracking in case of polar misalignment, and is able to correct for atmospheric refraction.

The **GM2000HPS** is able to point and track **artificial satellites** thanks to its slew speed of 20 °/s.
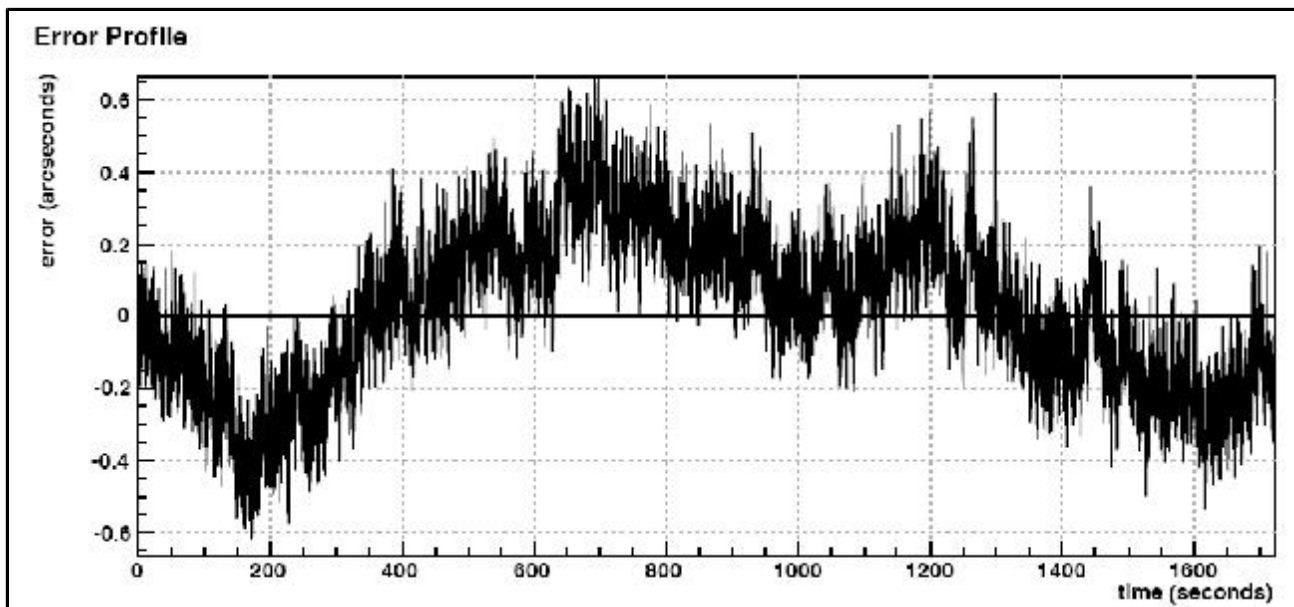
All this without using any external PC.

NGC 891. 400 s unguided exposure with GM2000HPS, 0.7 arcsecond/pixel scale.

GM2000HPS preliminary specifications

Tracking accuracy	~1 arcsecond peak-to-peak in 15 minutes ~0.6 arcsecond RMS
Pointing accuracy	< 20 arcsecond RMS with standard multiple-star alignment
Slew and satellite-tracking speed	20 °/s
Power supply	24 VDC, 3 A
User interface	Dedicated hand pad (no PC needed)
Control system	QCI v. 2

Tracking error measured with an high-resolution external encoder coupled to the R.A. axis.