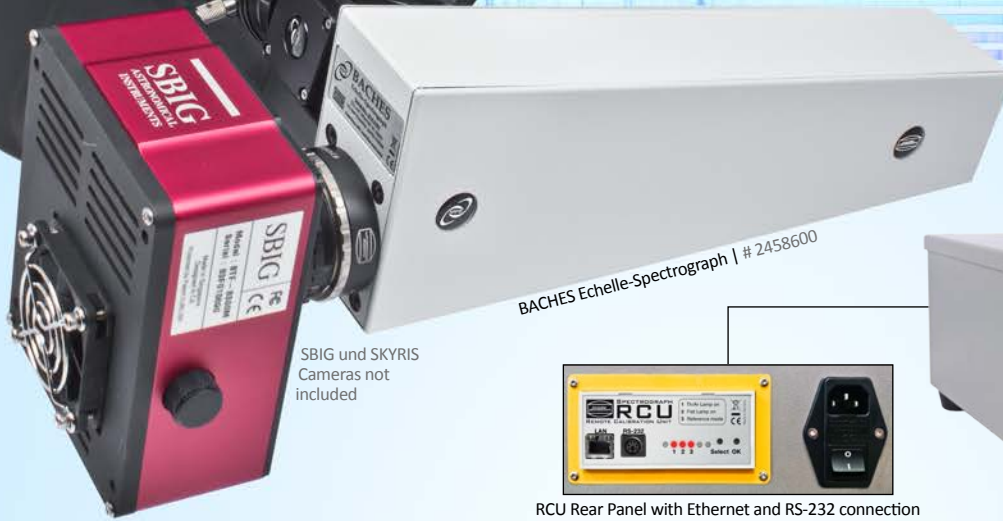




A New Level of SCIENTIFIC SPECTROSCOPY with small Telescopes



www.baader-planetarium.de/baches

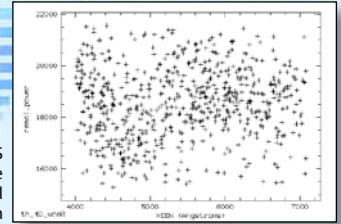


SBIG und SKYRIS
Cameras not
included

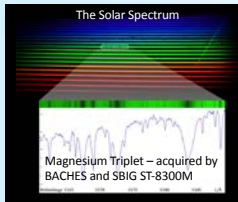
BACHES Echelle-Spectrograph | # 2458600

RCU Rear Panel with Ethernet and RS-232 connection

BACHES
Average
Spectral
Resolution



RCU - Remote Calibration Unit
(optional accessory | # 2458605)

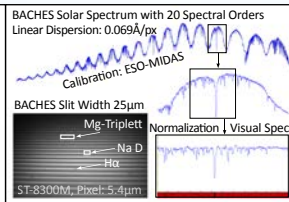


The Solar Spectrum

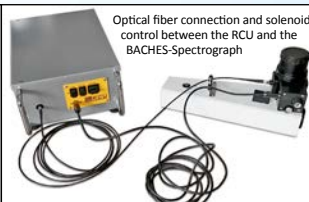
Magnesium Triplet – acquired by
BACHES and SBIG ST-8300M



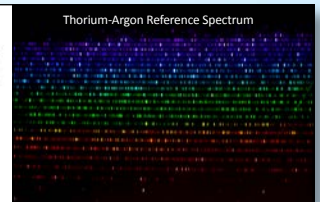
Standard Accessories included with
every BACHES Echelle Spectrograph



BACHES Solar Spectrum with 20 Spectral Orders
Linear Dispersion: 0.069Å/px
Calibration: ESO-MIDAS
BACHES Slit Width 25µm
Mg-Triplet
Na D
Hα
ST-8300M: Pixel=5.4µm
Normalization | Visual Spec



Optical fiber connection and solenoid
control between the RCU and the
BACHES-Spectrograph



Thorium-Argon Reference Spectrum

BAADER BACHES ECHELLE-SPECTROGRAPH

High Resolution Echelle Spectrograph with
Autoguiding Port and Remote Calibration Port

- average spectral resolution $R = 18,000$
- optimized wavelength range **392-800nm***
- changeable **25 and 50µm** slits. Slit length 125µm
- light and compact, **only 1350g** (without CCD camera)
- high mechanical stability, FE designed, **torsion deformation below 9µm** at 180° rotation
- optimized for sensor sizes **ca. 15x10mm, 9µm Pixel** (i.e. KAF-1603), usable with 7x4mm sensor sizes (i.e. ST-402) and **DSLR's**
- collimator focal ratio **f/10**
- optimized for **8" to 24" f/10 telescopes** (full resolution from f/8 to f/12)
- delivered in **calibrated condition**
- solenoid switches between the **light from the telescope** and the **ThAr calibration and flatfield lamp** of the RCU
- manual red LED for **Slit-Focusing**
- **two optional BACHES calibration versions available: Standard** with ThAr lamp mounted on BACHES body (with separate power supply). **Professional** with Remote Calibration Unit (RCU) with built-in ThAr lamp and halogen flatfield lamp remotely controlled via web interface

* depending on the size of the sensor

BAADER PLANETARIUM SPECTROGRAPH RCU REMOTE CALIBRATION UNIT

Accurate and Professional Calibration of
BACHES Echelle-Spectra

- **switchable** between fully manually controlled and fully remote controlled
- integrated **ThAr lamp and white light lamp** for spectral calibration and flatfielding
- **integrated power supply** for all components
- **high voltage 15mA current control** for maximum ThAr lamp efficiency
- **pre-aligned fiber coupling** to BACHES for the ThAr lamp and flatfield lamps, with a removable 50µm fiber, 2.5m in length
- **6 pin, 2.5m power cable** for the BACHES solenoid to switch between the **telescope light and the flatfield lamp**
- Remote control via **10/100 Mbit/s 10base Ethernet (RJ-45)**, TCP/IP protocol
- integrated web server for **fast and easy internet access** with any web browser
- additional local PC remote control via **RS232 serial line**
- size **320mm (L) x 215mm (W) x 125mm (H)**. L=345mm with handles
- weight net **5.6kg**. Power supply **230V AC, 25W**
- shielded case with four rubber pads for **vibration damping**
- **optional mounting accessories**, for either a 19" rack or direct telescope attachment, respectively



BAADER PLANETARIUM GMBH

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