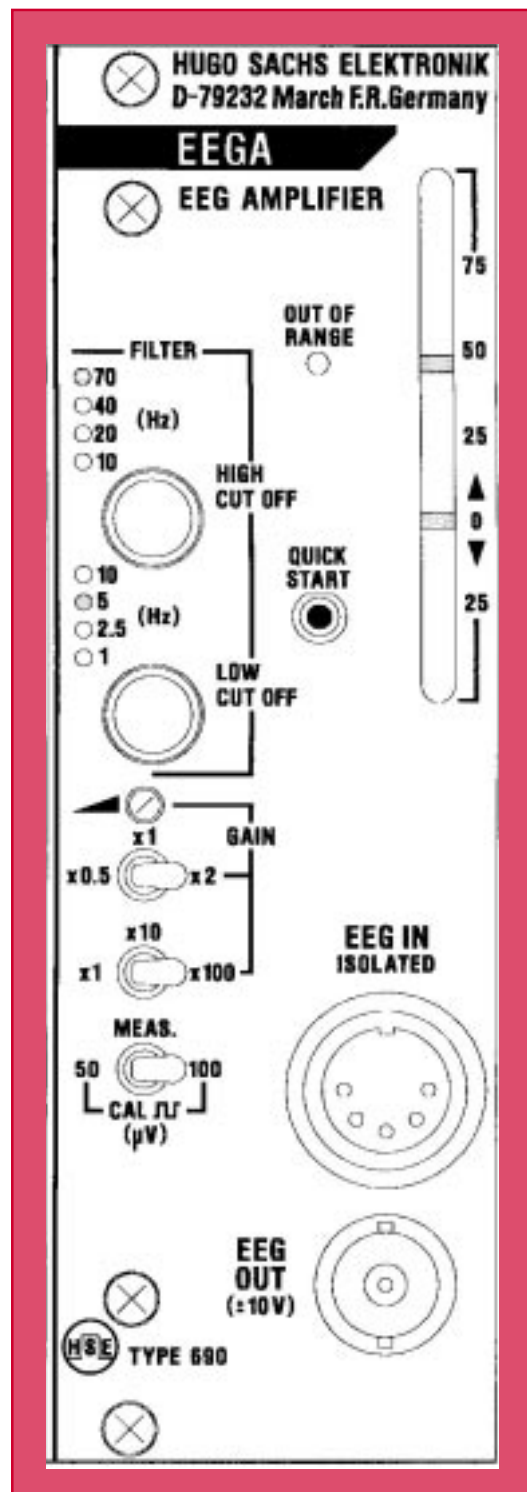


HSE-Harvard* EEG Amplifier Module (EEGA)

- Amplifier for a single EEG signal recording
- Floating input
- Frequency range suitable for all species from mouse up to large animals

This module is especially designed to amplify EEG signals in the PLUGSYS system. A floating input circuit is used to avoid hum and grounding problems. A bar graph display is integrated in the module to visualize the EEG signal. The filters are designed for EEG signals up to 70 Hz. The analog EEG signal is available at a BNC connector on the front panel and also internally on the PLUGSYS system bus. Both outputs can be used for recording on a chart recorder or for data acquisition. A square-wave signal generator with amplitudes of 50 μV and 100 μV is incorporated for calibration.



Specifications

| | | | |
|------------------------------|--|---------------|-----------------|
| Input | Floating differential input, isolated barrier internally clamped to 300 V, with protection against static discharges and 10 kHz input filter for HF suppression | | |
| Input Connector | 5-pin binder socket with screw lock; pin connection corresponds to those of standard 3-pin EEG input cable | | |
| Input Impedance | 10 ¹⁰ Ω | | |
| Common Mode Rejection | 106 dB | | |
| Filters | | | |
| Low-Pass Filter | (HIGH CUT OFF) 70 Hz, 40 Hz, 20 Hz, 10 Hz, | | |
| High-Pass Filter | (LOW CUT OFF) 10 Hz, 5 Hz, 2.5 Hz, 1 Hz | | |
| Filter Indication | By green LEDs on front panel | | |
| Gain Trimmer: | | | |
| Switch | x1 | x10 | x100 |
| In Position x0.5 | 100 to 500 | 1000 to 5000 | 10000 to 50000 |
| In Position x1 | 200 to 1000 | 2000 to 10000 | 20000 to 100000 |
| In Position x2 | 400 to 2000 | 4000 to 20000 | 40000 to 200000 |
| Display | Bar graph 0.75 V/LED | | |
| Output | BNC connector on front panel (±10 V) output voltage also available on PLUGSYS bus | | |
| Calibration | Square-wave signal generator with amplitudes of 50 μV and 100 μV | | |
| Recorder Output | Internal output is connected to bus system via jumpers; EEG signal is connected to recorder via Recorder Output Module (ROM); also possible to connect recorder directly to BNC connector "EEG OUT" at front panel | | |
| Quick Start | For rapid discharge of coupling capacitors by pressing QUICK START key | | |
| Power Supply | 5 V/600 mA, through connector from PLUGSYS bus system | | |
| Dimensions, H x W x D | 128.7 x 40.5 x 220 mm (5.1 x 1.6 x 8.7 in) | | |
| PLUGSYS Width* | 2 slot units | | |
| Connector | DIN 41612, 96-pin VG | | |
| Weight | 0.4 kg (0.9 lbs) | | |

| | |
|--------------------|---------------------------|
| Catalog No. | Model |
| CGS 8418.71 | EEGA EEG Amplifier Module |