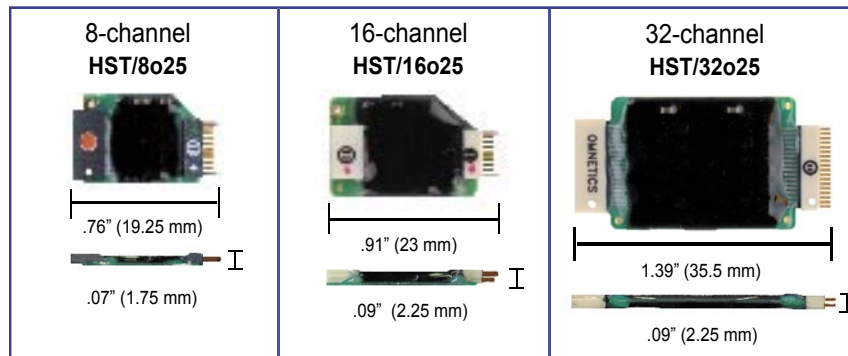


Plexon o25 Headsets



Plexon o25 headsets are miniature amplifiers designed to strengthen and buffer the signal picked up from high impedance recording electrodes. They are intended to be the first stage in the signal processing chain and should be placed as close to the recording electrodes as is feasible. These headsets are available in 8, 16, and 32 channel versions.

The 8-channel headset uses a connector with a single row of pins. The 16- and 32-channel headsets use connectors with two rows of pins. The center-to-center spacing of the input pins is 0.025".

Plexon o25 headsets are recommended for recording from microwire bundles as well as from multiple individual stiff-wire electrodes, using an appropriate adaptor.

Channel Count

Plexon o25 headsets are available in 8-, 16-, and 32-channel configurations. The part numbers for these headsets are:

HST/8o25 (only available as an 8-channel unit)
 HST/16o25 (only available as a 16-channel unit)
 HST/32o25 (only available as a 32-channel unit)

Gain

Plexon o25 headsets are available with a gain of 1x.

Side Stackability

Plexon o25 headsets generally are not side stackable. They can be placed close to one another, using the following dimensions as guidelines:

The input and electrode connectors for the 8-channel headset are .050" thick. The HST/8o25 headset is .065" thick.

The input and electrode connectors for the 16- and 32-channel headsets are .070" thick. The HST/16o25 and HST/32o25 headsets are .090" thick.

PLEXON PRODUCT LINE:

Multichannel
Acquisition
Processor

Offline Sorter

Recorder

VideoTracker

MEA
Workstation

WaveTracker

Preamplifiers
&
Power
Supplies

Headsets & Cables

Connectors

Electrode Drives

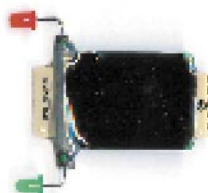
Referencing

All Plexon headsets have additional “reference” channels. The signal from these reference channels is typically used at the preamplifier level to subtract out common mode artifacts, such as electro-magnetic interference and motion artifacts, in the recorded signals.

The 8-channel o25 headset has one reference channel per eight recording channels. In the 16-channel and 32-channel o25 headsets, there is only one reference channel per 16 channels. In the 8- and 16-channel headsets, there are two possible configurations for the reference channel. (The 32-channel headset cannot be changed after assembly.) The input to the reference amplifier is typically grounded inside the headset (grounded reference configuration - the “GR” extension in the product number). This also causes pin 9 of the input connector to be grounded. However, the researcher may choose to connect the reference amplifier to a special reference electrode inside the brain. In this case, the input to the reference amplifier is disconnected from ground and pin 9 of the input connector becomes the input to the reference amplifier (true reference configuration - the “TR” extension in the product number).

Other Options

LED Headsets - The 32-channel headsets are available with mounted LEDs for use with animal tracking applications, such as VideoTracker, a real-time animal position tracking system.



Connectors for Headsets

HST/8o25-9P

Electrode CON/8o25m-9P (Omnetics A8177-001)
Alternate Input CON/8o25f-9P (Omnetics A8776-001)
Input CON/8o25f-9P (Omnetics A7674-001)
Output CON/8o25m-12P (Omnetics A7562-001)

HST/8o25-10P

Electrode CON/8o25m-10P (Omnetics A8393-001)
Alternate Input CON/8o25f-10P (Omnetics A8777-001)
Input CON/8o25f-10P (Omnetics A8376-001)
Output CON/8o25m-12P (Omnetics A7562-001)

HST/16o25-18P

Electrode CON/16o25m-18P (Omnetics A8141-001)
Alternate Input CON/16o25f-18P (Omnetics A8663-001)
Input (Omnetics A8104-001)
Output (Omnetics A8098-001)

HST/32o25-36P

Electrode CON/32o25m-36P (Omnetics A8648-001)
Input CON/32o25f-36P (Omnetics A8649-001)
Output (Omnetics A8237-001)

HST/8m

Electrode CON/8m-f-10P (Microtech GF-10)
Input CON/8m-m-10P (Microtech GM-10)
Output CON/8o25m-12P (Omnetics A7562-001)

Ordering Information

HST8o25

Reference part number HST8o25-xx-yy, where xx = # of input pins (xx = 9P or 10P), yy = reference option (yy = GR or TR)

HST/16o25

Reference part number HST/16o25-18P-yy, where yy = reference option (yy = GR or TR)

HST/32o25

Reference part number HST/32o25-36P-yy-zzz, where yy = reference option (yy = GR or TR), zzz = optional dual LEDs (zzzz = 2 LED)

