

GSI TympStar Version 2

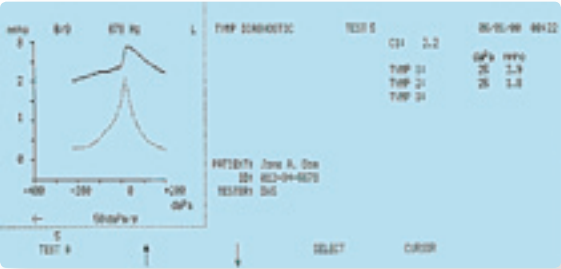
Version 2 of the GSI TympStar is the most complete middle-ear testing system you'll find. It combines all of the advanced features of Version 1 with the additional capacity to test Admittance (Y), Susceptance (B) and Conductance (G) at 226, 678 and 1,000 Hz probe tones. These enhanced testing capabilities have made Version 2 the preferred diagnostic middle-ear instrument for universities, medical schools and research labs.

The unique, ultra-light probe incorporated into the GSI TympStar's design is perhaps the most patient-friendly probe you'll find in a middle ear analyzer. Its superior construction allows you to obtain a quick and effective seal – while its LEDs keep you informed of test status.



The GSI TympStar's unique, ultra-light probe.

Two-Component Tympanometry



Version 2 offers more probe tones (226, 678 and 1,000 Hz) than conventional middle-ear diagnostic products. This helps you quickly and clearly determine where, along the ossicular chain, problems in the middle ear are occurring in patients of all ages.

Multiple Frequency Tympanometry



Multiple-frequency tympanometry allows you to easily determine the middle-ear resonance frequency. Normal middle ears exhibit a resonance frequency of between 800 and 1200 Hz. A middle ear with otosclerosis would be above 1200 Hz, and a disarticulated ossicular chain would be below 800 Hz. When used in preoperative and postoperative test comparisons, this can give you quantitative proof of a patient's improvement.

| TympStar Version Comparisons | | |
|------------------------------|------------|------------|
| FEATURES | VERSIONS | |
| | TympStar 1 | TympStar 2 |
| Tympanometry: | | |
| Screening | ■ | ■ |
| Diagnostic | ■ | ■ |
| Two-Component | | ■ |
| Reflex: | | |
| Threshold | ■ | ■ |
| ETF: | | |
| Intact TM | ■ | ■ |
| Perforated TM | ■ | ■ |
| Special: | | |
| Reflex Decay | ■ | ■ |
| ARLT | | ■ |
| Reflex Sensitization | | ■ |
| Multiple Frequency | | ■ |
| Program Mode | ■ | ■ |



Setting The Clinical Standard





GSI TYMPSTAR™

COMPREHENSIVE MIDDLE-EAR ANALYZER

Your Comprehensive Middle-Ear Testing Solution

We've designed the GSI TympStar to suit the clinical needs of audiologists and hearing specialists worldwide. No other middle-ear analyzer offers a broader range of testing capabilities, and no other system provides hearing professionals with the versatility, flexibility and functionality they demand – whether in a clinical or research setting.

Versatility Is the Key

The GSI TympStar comes pre-programmed with a series of default parameters for each test mode. As your testing needs change; however, the GSI TympStar also allows you to easily alter test parameters through its Program Mode. You can even automate a desired test sequence. By using the Program Mode, the GSI TympStar also makes it possible for multiple operators to program their own default parameters for tympanometry and reflex-threshold testing.



Comprehensive Testing Made Simple

The GSI TympStar's ergonomically designed control panel allows you to select a test protocol by simply pressing a single button, and its large screen makes for easy viewing of test parameters, possible alternatives and test results. The high-speed printer generates reports in concise graphical or tabular formats that are easy to read.

GSI TympStar options include:

- VGA monitor for displaying test results
- External printer that produces test results in a larger format
- Keyboard for entering patient information

The GSI TympStar also offers several options for managing and archiving data, including:

- Internal memory for storing up to 26 test results
- NOAH-compatibility for easy data management
- Multilingual display, instrument controls and printout

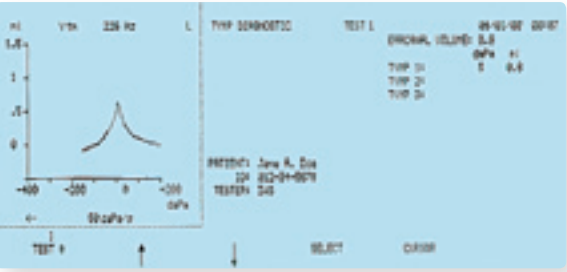


The GSI TympStar's ergonomically designed control panel allows you to easily administer tests.

GSI TympStar Version 1

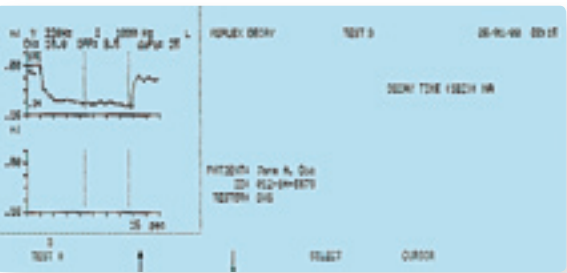
Version 1 of the GSI TympStar offers you four different testing modes, enabling you to perform a battery of tests efficiently, easily and accurately.

Diagnostic Tympanometry



Version 1 offers automatic or manual 226 Hz tympanometry in a diagnostic or screening mode. Sensitivity scales are automatically determined based on the peak amplitude of the tympanogram. The built-in screen can simultaneously display up to three tests, helping you to determine the presence or absence of a peak on a low-amplitude tympanogram.

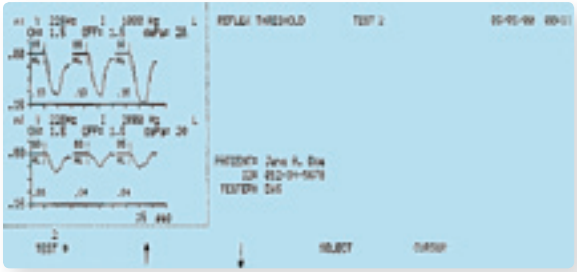
Reflex-Decay Testing



The GSI TympStar's screen clearly displays reflex-decay time in seconds, as well as marks the five- and ten-second interval points. And the peak pressure value from the reflex-threshold test is maintained for the decay test.

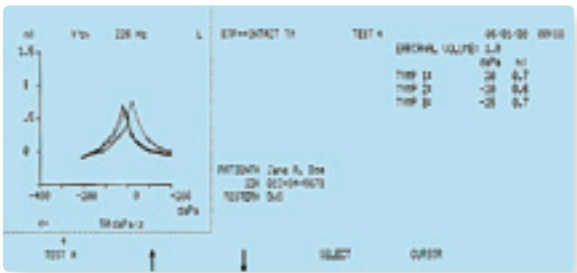


Acoustic Reflex Threshold Testing



Acoustic reflex testing with Version 1 of the GSI TympStar allows you to automatically or manually time the tone presentation. Multiple stimuli and intensities are available to determine the threshold level for the acoustic reflex. The peak pressure value from the tymp is automatically reset for reflex testing, or can be manually adjusted. In addition, you can program reflex threshold seeking, and mark the reflex threshold.

Eustachian Tube Function (ETF) Testing



Two different modes are available. One for testing ETF with an intact tympanic membrane (TM) and one for testing ETF in a perforated TM. The ETF mode for an intact TM eliminates the need to instruct a patient to perform a Toynbee or Valsalva test.

Setting The Clinical Standard

For over 60 years Grason-Stadler (GSI) has been "Setting The Clinical Standard" in Audiometry, Tympanometry and hearing healthcare diagnostics. Far more than a tagline, it is embedded in our corporate DNA and is the driving force behind everything we do.

Market feedback confirmed that GSI is seen as the Clinical Standard. It also established the three attributes most identified with the GSI brand; Quality, Reliability, User-Friendly.

Quality

Quality was by far the most frequently used word by our partners to describe the company and the brand. Product quality has been a hallmark of the GSI brand over the years, and remains the predominant association people have with the company to this day.

Reliability

Reliability, durability, longevity, trustworthiness. GSI products exceed industry expectations regarding reliability. It has become another way of defining the organization and a proven benefit of a partnership with GSI.

User-Friendly

As hearing healthcare technologies have developed, the vast number of potential features can become quite overwhelming. This is why GSI has always worked closely with our Partners to identify and prioritize what product functionality is most important to them, how it should be conveyed, and what will provide maximum user and patient benefit.

