1992 — TTS-1

1997 — TTS-2

2004 — TTS-3

TTS-4
Time Transfer System-4

20 years of improving time transfer methods

**Time Transfer System TTS-4
Product specification**

PIK TIME SYSTEMS®

Introduction - confidence through experience

It has been over 20 years since first "TTS" was introduced. Single frequency TTS-1 as first in the family, a very successful TTS-2, then TTS-3 with GLONASS, now TTS-4. Till the date more than 140 units have been delivered to over 30 countries. As our core product, TTS is being continuously improved towards better observation results and deployment of the recent time & frequency knowledge. Software upgrades are provided free of charge every 3 months on average. **Excellent observation results, long and stable operation, wide configuration possibilities, as well as user friendly solutions are main advantages of the system.** TTS-4 generates data on its own and requires no daily assistance. The system is working under LINUX providing multitasking and integration with networks.

Time Transfer System TTS-4

Main screen of TTS-4

Access, Operation & Configuration

- **12,1" built-in touch** screen offers immediate access to observations, configuration and main parameters: delays, antenna position, key system status indicators.
- via WEB interface
- via USB keyboard
- via membrane keypads

Data recording & storage

Date can be:
- downloaded from WEB interface (using WEB browser)
- downloaded from integrated FTP server
- sent to external FTP server (using WEB browser)
- saved on USB memory (using console or WEB interface)
- stored on a hard disk (1TB)

WEB interface main menu

Tracking features

Supported navigation systems:
GPS, GLONASS, Galileo, WAAS/Egnos
Number of channels: 216
Number of satellites: all-in-view
Supported frequencies:
GPS: L1, L2, L5
GLONASS: L1,L2 option: L3
GALILEO: E1, E5A , option: E5B, altBoc
Supported codes:
GPS: L1C, L2C, L1P, L2P, L5P
GLONASS: L1C, L2C, L1P, L2P option: L3
GALILEO: E1, E5A , option: E5B, altBoc

Input/Output

3-20 MHz frequency input (adjustable)
Local 1 PPS input
Antenna TNC connector
1000BASE-T Ethernet port
Internal PS/2 keyboard connectors
Internal VGA display connectors
2 USB connectors on front panel

Data charecteristics & availability

Data type: Code and Carrier
Data output format: CGGTTS, RINEX. **The only CGGTTS Glonass receiver on the market.**
Data formats meet all formal requirements.
Data availability:
CGGTTS: 30 sec after each 13-min. observation session is finished
RINEX: real time

Physical & Enviromental

Main unit dimensions - 19"/5U
 (470mm x 431mm x 220mm)
Rack ready chassis made of heavy duty metal
Screen - 12,1" TFT LCD
Resolution 1024 x 768 (XGA)
Operating voltage: AC 230V +/-10%, 45 to 60 Hz, or AC 110V +/-10%, 55 to 65 Hz
Redundant power supply support
Operating temperature: 0ºC to +50 ºC

Antennas

Standard antenna

Choke ring antenna

Temperature stabilized choke ring antenna

PIK TIME SYSTEMS®

Time Transfer System TTS-4 has been tested by approved independent laboratory and is in compliance with the essential requirements and other relevant provisions of European Union laws.

Continuous improvement process . We reserve a right to provide you with better solutions than covered in the brochure.

Brochure released - 05.2013

CE