

Solartron 795x

Signal Converters

Data sheet
B1251

Solartron Mobrey's 795x family of signal converters are the perfect complement for all density and viscosity transducers, enabling you to create highly flexible measurement systems which are accurate, easy to set up and use, and interface simply with your process and plant systems.

Solartron Mobrey's signal converters boast a unique architecture, based on standard hardware platforms - panel or wall mounted - supported by specific application software. The benefits of this approach include:

- ▶ High integrity and reliability
- ▶ Maximum flexibility
- ▶ Interchangeable platforms
- ▶ Greater cost efficiency
- ▶ Optimised user interface
- ▶ Easier communications

Versatile

The 795x family accepts inputs from all Solartron Mobrey density and viscosity transducers and a wide variety of other transducers and transmitters, including temperature, pressure and differential pressure instrumentation.

Simple to use

The simple-to-use menu-driven keyboard provides complete access to all database variables and configuration, with password/ keyswitch protection if required.

Total processing capability

A comprehensive range of calculations are available as standard on 795x, and special functions can also be configured to meet virtually every need.

Communications

The 795x family offers unprecedented communications capabilities and can interface directly to RTUs, PLCs, DCSs, 'smart' instruments and any other flow computers.

Smart transmitters

Intelligent instruments from many vendors are easily integrated using the Smart option card on the 795x; protocols supported include HART.

Remote configuration

The signal converter's configuration can easily be altered remotely using either a PC_Config or FC_Config software, which is available from Solartron Mobrey. The software supports configuration and data logging from 795xs' via Modbus, including double precision data handling. Configuration and logging can be performed while normal plant system operation continues.

The 795x family is the latest evolution of the highly successful series of signal converters which Solartron Mobrey has developed over the past 25 years, including the 7900, 7920, 7925, 7940 and 7945 range. In response to user feedback and technical advances, the new 795x series provides:

- ▶ Increased connectivity to other devices and 'smart' networks
- ▶ Extra I/O capacity
- ▶ Menu-driven user interface
- ▶ Increased flexibility and system-building functionality
- ▶ Superior performance
- ▶ Intelligent configuration tool



Hardware

The 795x is available in two hardware models. The 7950 is wall mounted, while the 7951, which has additional I/O capability, is panel mounted. Option cards are available which further extend communications and I/O.

Note: Different versions of 795x Signal Converter software may not support all hardware capabilities.

Model	7950	7951	Opt.
Time period inputs †	4	4	
Analog (PRT 4-wire) inputs	4	4	
Analog (0/4-20mA) inputs	4	4	+4/+6
Analog (0/4-20mA) outputs	4	4	+4
Pulse inputs	1	2	
Digital/status inputs	8	8/18*	
Digital/status outputs	8	6/16*	
Communication ports			
RS232/RS485, 19k2baud	3	3	
HART inputs			
Mounting	Wall	Panel	.
Connector options:			
Klippon	Yes	Yes	
D-type	No	Yes	

* increased I/O only available with D-type connectors.

† Used with Solartron Mobrey vibrating element density and viscosity transducers.

Environment	7950	7951
AC power		
90-265V ac, 50-60 Hz	Yes	No
DC power		
21-30V dc @25W	Yes	Yes
Enclosure	NEMA4X	NEMA12
	IP65	IP52
Operating temp.	-10 to 50°C, 14 to 122°F,	
Storage	-30 to 70°C, -22 to 158°F,	

Dimensions (mm/in)	7950	7951
Height	320/12.6	101/4.0
Width	300/11.8	197/7.8
Depth	130/5.1	320/12.6
Weight	2.2/4.85	1.5/3.30

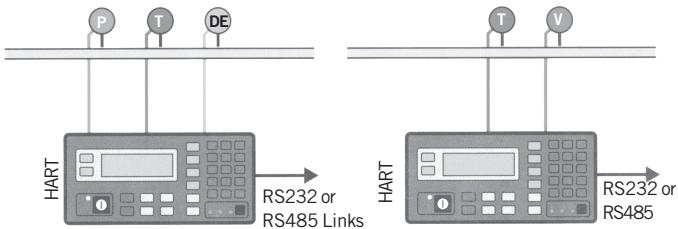
Regulations

EMC: Emissions EN50081-2 : 1994 (heavy ind.)
Immunity EN50082-2 : 1995 (heavy ind.)

Software

795x Signal Converter software can support liquid density and viscosity applications, and also gas density. User-friendly 'wizards' help you to set up your application quickly and simply - without confusing, unnecessary detail.

Typical applications and the facilities available are described below.



Liquid/Gas Density

Inputs

- Density measurement from 78xx density transducers connected to time period input; or Covimat-105 on 4-20mA input;
- Temperature measurement via PRT, 4-20mA or HART;
- Pressure via HART transmitter or 4-20mA

Liquid Viscosity

Inputs

- Viscosity, from 7827 transducer on time period input, or Covimat-105 on 4-20mA input;
- Temperature measurement via 4-20mA, PRT or HART transmitter.

Typical applications

Interface detection on pipelines
Quality control
Custody transfer metering
Fuel density for mass loading
Blending control
Dilution control
Coating control

Typical applications

Blending control
Product quality
Coatings

For full details of the 7950 and 7951 hardware platforms - consult TB795001 and TB795102

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