Radiosonde SRS-C34 Type 8

T-Sonde with three temperature channels for ARGUS37

Picture

SRS-C34 Type 8

The Sonde SRS-C34 Type 8 contained a high-quality measuring unit with 3 temperature channels for sensors with small time constants.

The measuring unit has been specifically developed for meteorological research. It is supplied with a transponder for the ARGUS sounding system.

The measuring unit is fully configured and adjusted at *meteolabor ag.* This eliminates elaborate start preparations and calibration procedures. However the Hypsometer pressure measurement accuracy can be improved by a "Base Line Check".

Data processing and data interface

The controller calculates the physical quantity from its current measured values and the coefficients stored in the controllers memory. The output is a serial string containing data, channel number and the checksum.

The SRS C34 features a modular design. Thus various other types can be supplied:

Sensors: Hypsometer, thermocouple-thermometer, Hygristor, ozone sensor, SnowWhite®, GPS

Output: ASCII, binary, pulse modulation for secondary radar system, 403MHz FM narrow band crystal controlled synthesized transmitter.

Because of its unique measurement technique SRS-C34 does not need any individual sensor calibration and can easily be used again if recovered.

Technical data

Measurement channels	Measured variable	Meas. range	Accuracy	Unit
Channel 0	Offset (internal used value)	-	-	-
Channel 1	not used			
Channel 2	Internal reference temperature	-10 ... + 50	±0.1	°C
Channel 3	Air temperature	-100 ... + 60	±0.1	°C
Channel 4	Span (internal used value)	-	-	-
Channel 5	Air temperature	-100 ... + 60	1	°C
Channel 6	Air temperature	-100 ... + 60	±0.1	°C
Channel 7	not used			
Channel 8	not used			
Channel sequence	0, 2, 3, 4, 5, 6			
Interface	**Description**		**Setting**	**Unit**
Type	AFSK		2900 / 4700	Hz
Baud rate	Transmission speed		2400	bps
Delay t_1	Time signal TELEM active until 1st start bit		2	ms
Delay t_2	Time of last stop bit until TELEM inactive		0	ms
TELEM level	Active level of TELEM signal		0	V
Synch characters	Synchronization of data transmission		2 / 255	
Baud rate GPS	Internal interface GPS to SRS-C34		4800	bps
Power supply	**Description**		**Range**	**Unit**
Supply source	2X 9V battery 6LR61		8.5 ... 12	V
Power input	Without GPS module		ca. 130	mA
	With GPS module		ca. 210	mA

*) corresponding abt 20m geopotential accuracy

Block diagram
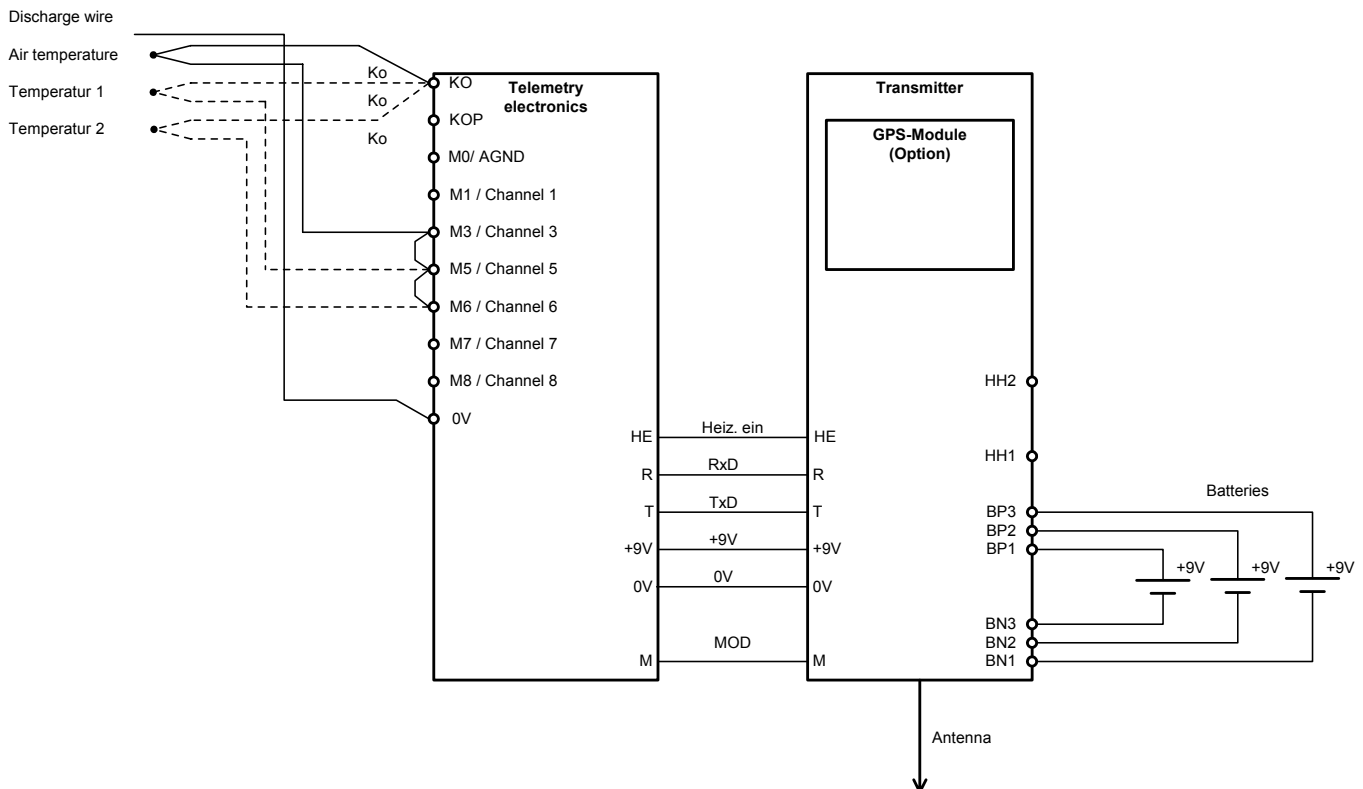
Physical dimensions

Measuring unit	143 x 50 x 25 mm	(l x b x d)
Snow White® Sensor	210 x 260 x 90 mm	(l x b x d)
Hypsometer	15 x 170 mm	(D x l)

Ordering information

- Sonde without GPS   MRS-SRS-C34/012
- Sonde with GPS   MRS-SRS-C34/013