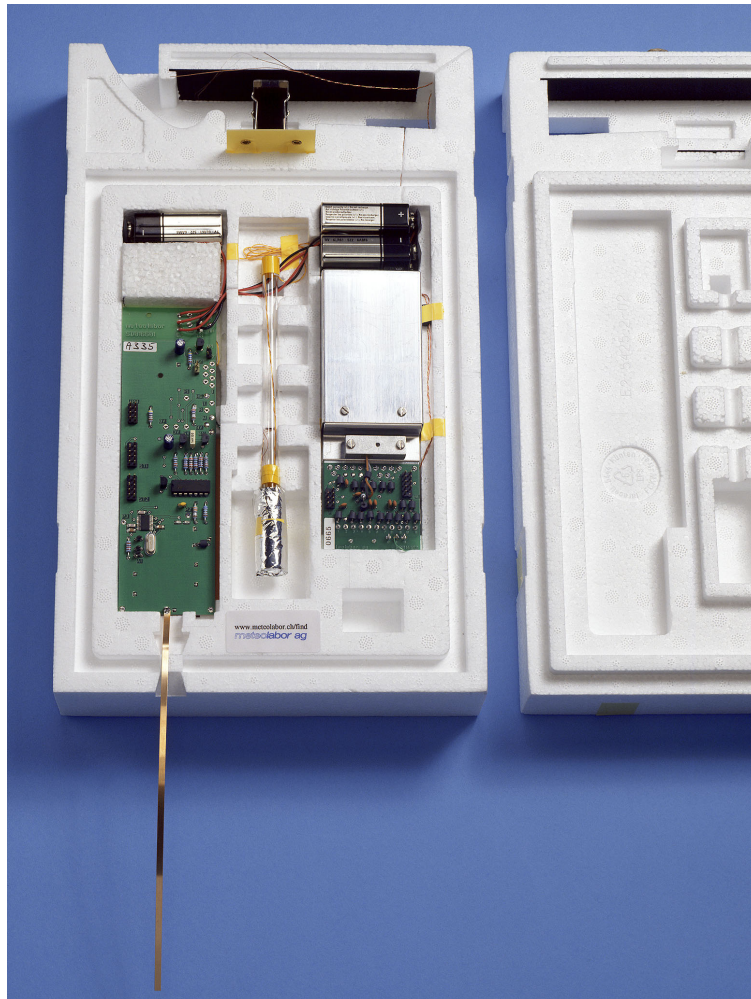


# Radiosonde SRS-C34 Type 4

PTU-Sonde for ARGUS37. Air temperature is measured three on three channels.



SRS-C34 Type 4

The Sonde SRS-C34 Type 4 contained a high-quality measuring unit with full-range water hypsometer, temperature sensor with small time constant and humidity sensor Hygistor.

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

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

Sensors: Hypsometer, thermocouple-thermometer, Hygistor, 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.

controllers memory. The output is a serial string containing data, channel number and the checksum.

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Hofstrasse 92  
CH-8620 Wetzikon 1  
Internet: [www.meteolabor.ch](http://www.meteolabor.ch)

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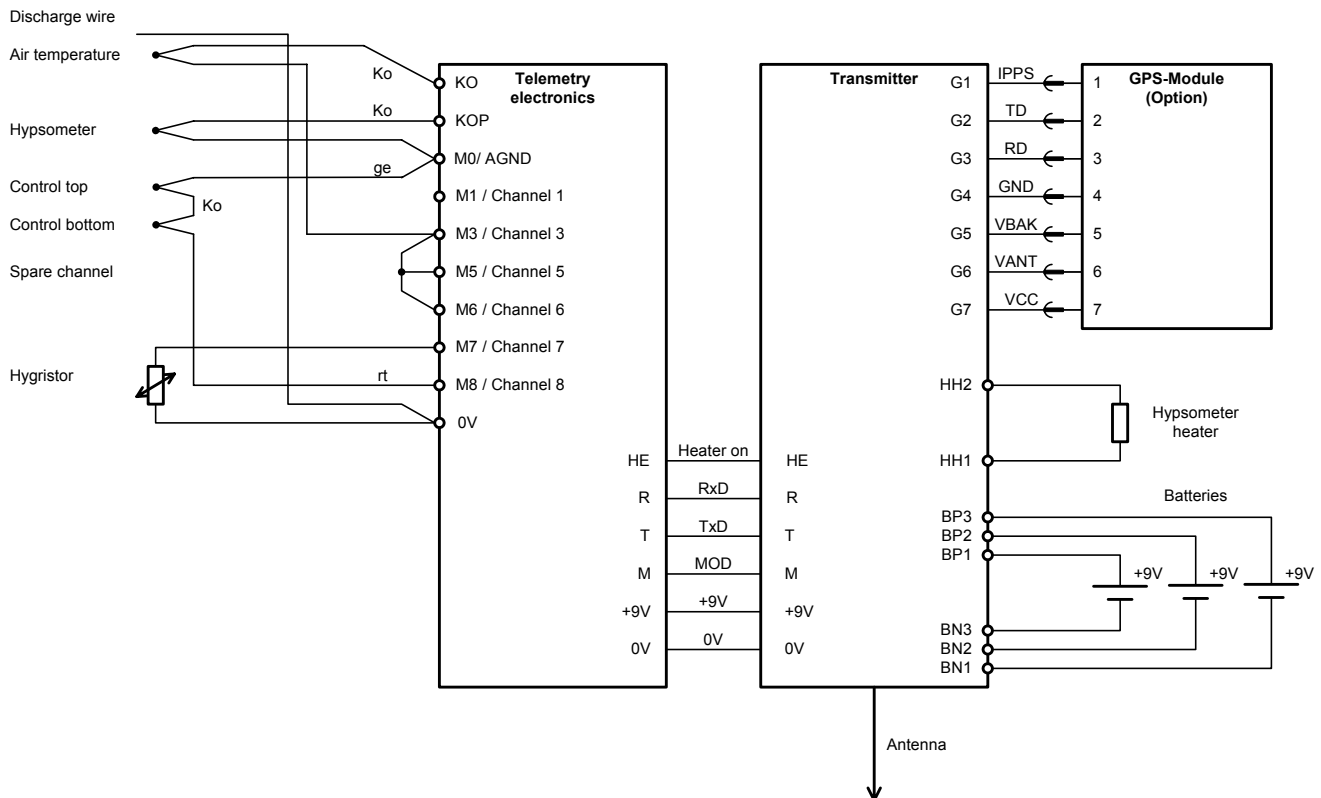
Tel. +41 44 934 40 40  
Fax +41 44 934 40 99  
E-Mail: [sales@meteolabor.ch](mailto:sales@meteolabor.ch)

## Technical data

Measurement channels	Measured variable	Meas. range	Accuracy	Unit
Channel 0	Offset (internal used value)	-	-	-
Channel 1	Barometric pressure	5 ... 1100	2 ‰*)	hPa
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	Hygistor Voltage	- 4 ... 1 x 10 <sup>3</sup>	1	µV
Channel 8	Hypsometer heater (internal used value)			
Channel sequence	0, 1, 2, 3, 4, 5, 6, 7, 8			
Interface	Description		Setting	Unit
Type	AFSK		2900 / 4700	Hz
Baud rate	Transmission speed		2400	bps
Delay t <sub>1</sub>	Time signal TELEM active until 1 <sup>st</sup> start bit		2	ms
Delay t <sub>2</sub>	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. 175	mA
Hypsometer heater	With GPS module		ca. 230	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-C34/004
- Sonde with GPS MRS-SRS-C34/005
- Sonde with GPS, and 3 Sensors MRS-SRS-C34/006

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