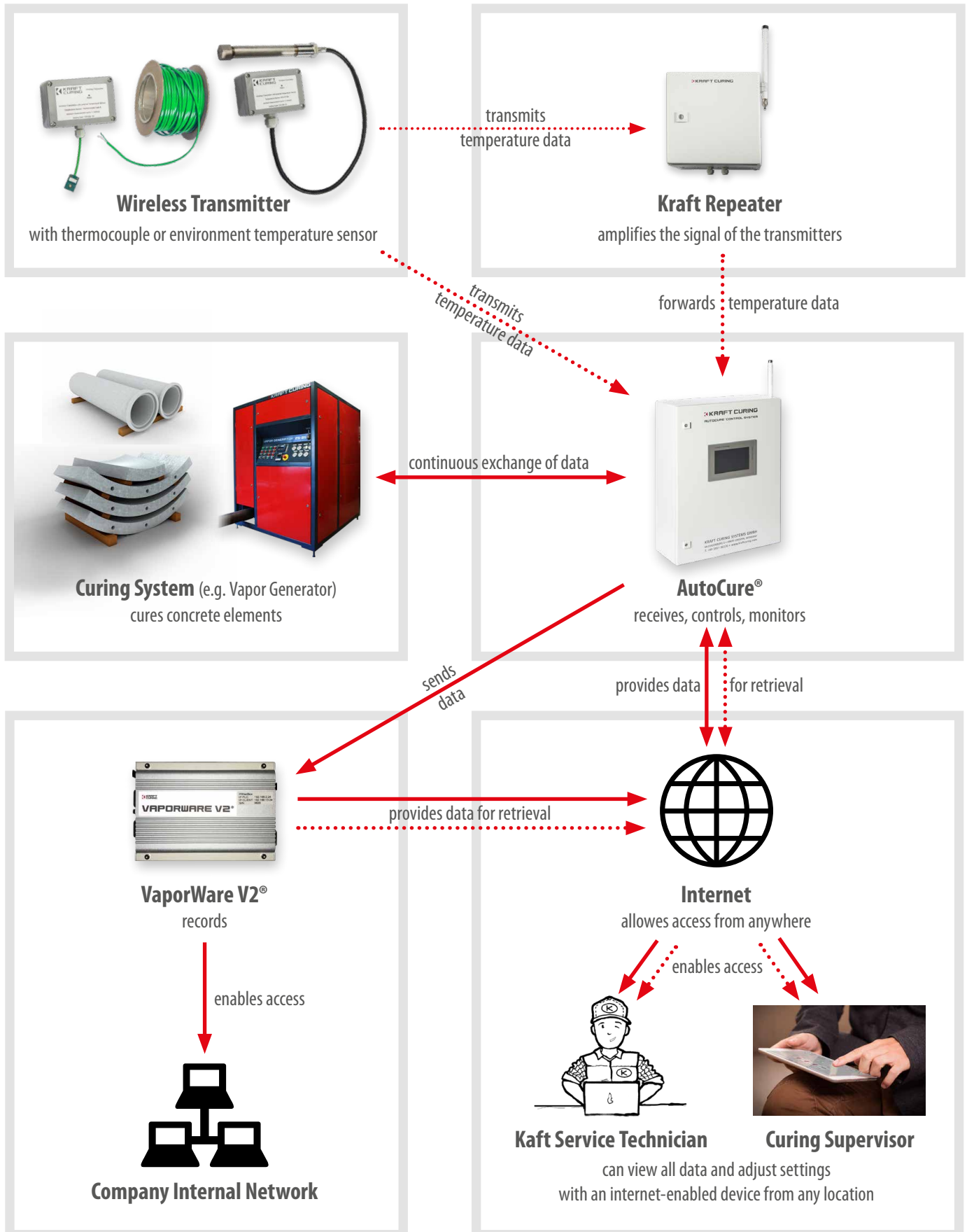


WIRELESS SENSOR SYSTEM

for measuring the concrete curing conditions



.....➡ wireless connection ➡ wired connection



WIRELESS SENSOR SYSTEM

for measuring the concrete curing conditions



TRANSMITTER DESCRIPTION

This is a transmitter with a very high degree of protection (IP65). The antenna is located in the housing. The thermocouples are connected via a cable gland. Dimensions of the housing in mm: 110x75x55 LxWxH.



Thermocouple type K,N,J,T,S,B temperature sensor



Pt100/1000 temperature sensor



RECEIVER DESCRIPTION

The device which is installed in the AutoCure® control cabinet or in the Kraft Repeater is a radio receiver designed for top hat rail assembly. It operates as coordinator in small low-energy wireless networks according to the international standard IEEE 802.15.4 in the licence-free 868MHz-band. Any number of subscribers can be connected in one network. It is also possible to operate various networks in parallel.

In open-field conditions, a communication range of up to 600 m can be achieved. An internal bus provided in the top hat rail allows up to 8 analogue outputs to be controlled. Furthermore, a digital signal is available via an RS485-interface just as a USB-interface. The RS485-interface can be switched between internal protocol and modbus RTU. The USB interface is provided for the programming of the various parameters just as for the output of the values. The USB connection cable and the software for the PC are included in the scope of delivery. When the battery is flat, a semiconductor relay generates a signal. Another signal can be configured as alarm indicator.

TECHNICAL PARAMETERS

Transmission frequency:	868/915 MHz	
Type of network:	6LoWPAN	Star/Mesh
Serial data interface:		Modbus RTU possible
Data transmission rate:	19200 baud	
Programming interface:	USB	
Supply voltage:	24V DC $\pm 20\%$	Protected against reverse polarity
Current consumption:	8mA	
Digital outputs:	1x Low Bat, 1x Alarm	HL-Relais in each case
Antenna:	rod antenna 110mm, SMAconnector	unscrewable
Range in the open:	appr. 600m	depending on terrain
Range within buildings:	appr. 50m	greatly dependent on structure of the building
Housing:	polycarbonate	
Colour:	grey	
Type of terminals:	screw terminals	0.2...2.5 mm ²
Dimension:	55x90x60mm	l x w x h
Weight:	1125g	including internal bus
EMC:	EN 61326-6-1:2013	emissions and immunity
Assembly:	top hat rail 35mm	