

## 2. Products brief

### 2.1 Part numbers and versions

The products described in this technical documentation are Leuze HF compact devices, belonging to a family of industrial-grade products for the usage in light and heavy industry applications.

There are two different versions equipping the same HF radio interface (13.56MHz, an antenna is integrated in the top label, together with system, antenna and Ethernet status LEDs), and they differ by the communication protocol – ProfiNet and TCP.

Description	Article code	Part number
HF compact ProfiNet	RDH 348i 00	50150665
HF compact TCP	RDH 308i 00	50150666

Table 1: list and version of devices in scope of this TCF document.

### 2.2 Interfaces

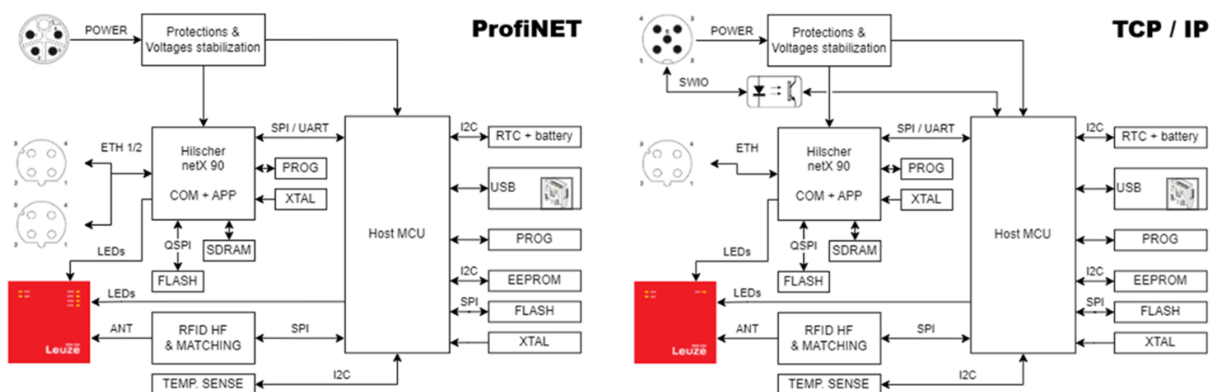


Figure 1: HF compact products differentiation.

HF compact device	ProfiNet	TCP
Power input	M12 L-coded, 4P, male	M12 A-coded, 5P, male
Ethernet connection	2x M12 D-coded	1x M12 D-coded
I/O	No	2x I/O lines
Display (LEDs)	1x bicolor SYS status 1x bicolor ANT status 2x YG ETH link 2x RG ETH status	1x bicolor SYS status 1x bicolor ANT status 1x YG ETH link 1x RG ETH status

Table 2: List of HF compact interfaces

## 2.2.1 HF compact ProfiNet

Please refer to the datasheet for further information.

HF compact ProfiNet features	
Input voltage	24±6V <sub>DC</sub>
Power rating	4W
Protection class	III
Operating frequency	13.56MHz ± 7kHz (ISO 15693, ISO 14443A)
Operating temperature	[-32;60] °C
Degree of protection	IP67 / NEMA6
Reading distance	200mm (depends on transponder type, antenna and environmental conditions)
Supported transponders	ISO xxx (EPC class xxx)
Physical connectors	Input power (M12-L male), 2x ETH ports (M5-D male)
Communication protocol	ProfiNet
Status display	2 bicolor LEDs + 2x ETH bicolor LED pairs

Table 3: HF compact ProfiNet features.

## 2.2.2 HF compact TCP

Please refer to the datasheet for further information.

HF compact TCP features	
Input voltage	24±6V <sub>DC</sub>
Power rating	4W
Protection class	III
Operating frequency	13.56MHz ± 7kHz (ISO 15693, ISO 14443A)
Operating temperature	[-32;60] °C
Degree of protection	IP67 / NEMA6
Reading distance	200mm (depends on transponder type, antenna and environmental conditions)
Supported transponders	ISO xxx (EPC class xxx)
Physical connectors	Input power (M12-A male), 1x ETH port (M5-D male)
Communication protocol	TCP + 2x IO lines on power connector (24V / 60mA output, 8mA input)
Status display	2 bicolor LEDs + 1x ETH bicolor LED pair

Table 4: HF compact TCP features.