HF-DES Protocol Comparison

Command Telegrams from PC/PLC to RFID Device

HF-Series			DESFire-Series		
Length	**Description**	**Value**	**Length**	**Description**	**Value**
1 Byte	Start of Telegram	0xAA (fixed value)	1 Byte	Start of Telegram	0x50 (fixed value)
1 Byte	Device Address	0x00…FF	–	–	–
1 Byte	Length	0x00…FF	2 Bytes	Length	0x00…FF
1 Byte	Command Code	0x00…FF	1 Byte	Command Code	0x00…FF
0…n Bytes	Data	0x00…FF	0…n Bytes	Data	0x00…FF
1 Byte	Checksum	0x00…FF	1 Byte	Checksum	0x00…FF
1 Byte	End of Telegram	0xBB (fixed value)	–	–	–

Reply Telegram from RFID Device to PC/PLC

HF-Series			DESFire-Series		
Length	**Description**	**Value**	**Length**	**Description**	**Value**
1 Byte	Start of Telegram	0xAA (fixed value)	1 Byte	Start of Telegram	0x50 / 0F0 (fixed values)
1 Byte	Device Address	0x00…FF	–	–	–
1 Byte	Length	0x00…FF	2 Bytes	Length	0x00…FF
–	–	–	1 Byte	Command Code	0x00…FF
1 Byte	Status	0x00…FF	–	–	–
0…n Bytes	Data	0x00…FF	0…n Bytes	Data or Error Status	0x00…FF
1 Byte	Checksum	0x00…FF	1 Byte	Checksum	0x00…FF
1 Byte	End of Telegram	0xBB (fester Wert)		–	–

Request of Firmware Version

0xAA 00 01 86 87 BB	0x50 00 00 04 54