

KCNET Protocol Version 1.2

Commands PIO-Communication (binary)

Command	Number	Byte 1	Byte 2	Byte ...	Answer
Write Bytes to Pointer+ (8000H+)	0	lowCounter	highCounter	Counter * Bytes	-
Read Bytes from Pointer+	1	lowCounter	highCounter		Counter * Bytes
Write Address-Pointer for Command 0/1	2	lowAddress	highAddress		-
Read Timer	3				Byte Tlow, Byte Thigh
Write Byte to address (8000H+)	4	lowAddress	highAddress	Byte	-
Read Byte from address	5	lowAddress	highAddress		Byte
Write IP-Address 0...7	6	Number (0...7)	4 Byte IP Net-Order (b4, b3, b2, b1)		-
Read IP-Address 0...7	7	Number (0...7)			4 Byte IP Net-Order (b4, b3, b2, b1)
Read Dynamic Port Number	8				2 Byte Port Number Net-Order (b2, b1)
Read SW-Version	9				Byte MINOR, Byte MAJOR
Read HW-Version	10				Byte MINOR, Byte MAJOR
Read Link State	11				Byte
Read Identity String	12				String + 0 (max. 128 Byte)
Read Command Errors	13				Byte Elow, Byte Ehigh

Commands RS232-Communication (ASCII, 1 SPC between ARG's)

Command	CMD	Arg 1	Arg 2	Arg ...	Answer
CLS & Help	ENTER				display Help-Screen
Read ID	k				Message
Read Config	c				Message
Read SW-Version	s				Message
Read HW-Version	h				Message
Read Link State	l				Message
Write Byte to address	w	Address hex	Byte hex		Address=Byte
Read Byte from address	r	Address hex			Byte
Write Address-Pointer for Command x/y	p	Pointer hex			Pointer
Write Bytes to Pointer+	x	Counter hex	Counter * Bytes hex		Bytes of Counter (Address to Address)
Read Bytes from Pointer+	y	Counter hex			HEX- & ASCII-Dump Bytes
Debug PIO-In on/off	i				Message new State
Debug PIO-Out on/off	o				Message new State

Restrictions of the PIO-Interface

- locking conditions with PIO-Output as well as PIO-Input are broken off by 524 ms and the complete command-processing puts back in normal state
- PIO has only on addresses of the TCP/IP-Stack writing-access (8000H ... FFFFH)
- PIO cannot write the Ethernet-MAC-Address of the TCP/IP-Stack (8009H ... 800EH)