UdpRecv()

This FBK is used to receive datagrams.

Asynchronous handling causes the function block to return $\underline{\sf ERR}$ $\underline{\sf FUB}$ $\underline{\sf BUSY}$ until the FBK is either finished successfully or an error occurs.

This function block can only be used conditionally for **redundancy**. The applicable limitations are described in the following sections:

Communication
Handle must be initialized
Hidden pointer usage
Asynchronous execution

Additional information can be found in the "Redundancy" section.

Parameters

I/O	Parameter	Data type	Description	
IN	enable	BOOL	Enables the FBK.	
IN	ident	UDINT	Ident from UdpOpen.	
IN	pData	UDINT (given as a pointer to STRING)	Pointer to data buffer.	
IN	datamax	UDINT	Data buffer length in bytes.	
IN	<u>flags</u>	UDINT	Receive flags.	
IN	pIpAddr	UDINT (given as a pointer to STRING)	Address of the string where the IP address of the transmitter should be stored. This parameter is optional. If 0 is specified, it is ignored. This parameter is also ignored if the port is connected (UdpConnect)!	
OUT	status	UINT	Function return value (<u>error numbers</u> , 0 = no error)	
OUT	recvlen	UDINT	Datagram length in bytes.	
OUT	port	UINT	Port number of transmitter. This parameter is not set if the port is connected (UdpConnect)!	

Call syntax (Automation Basic)

UdpRecv (enable, ident, adr(Data), datamax, flags, adr(IpAddr), status, recvlen, port)

Function description

This FBK is used to receive datagrams. The datagram is copied from the socket's receive buffer to the

specified data buffer (pData, limited by datamax). The data buffer should be at least as large as the datagram.

The IP address of the sender is output in string format (decimal). If the *pIpAddr gesetzt* parameter is specified (optional), it must point to a string with a length of at least 16 characters. If a port is connected (UdpConnect), the *pIpAddr* and *port* parameters are ignored or not set.

If the specified receive buffer length is less than the actual length of the received data packet, then only the data of the specified length is used (no status message). The rest is ignored (discarded)!

Supported flags

• udpMSG_PEEK - Datagram is not deleted from the receive buffer.

Flags are set bit-by-bit.

Error numbers

Value	Name	Description	Correction
0	ERR_OK	Status OK.	
32500	udpERR_INVALID_IDENT	The specified ident is not valid.	Check the specified ident.
32503	udpERR_PARAMETER	The <i>pData</i> data pointer is not set (0). An invalid flag is set.	Check the specified parameters.
32505	udpERR_NO_DATA	No data ready for receipt.	Try again later.
32599	udpERR_SYSTEM	Unexpected error during receiving.	Check the system.
65534	ERR_FUB_ENABLE_FALSE	FBK not enabled.	Enable the FBK.
65535	ERR_FUB_BUSY	FBK still working.	Call it again.