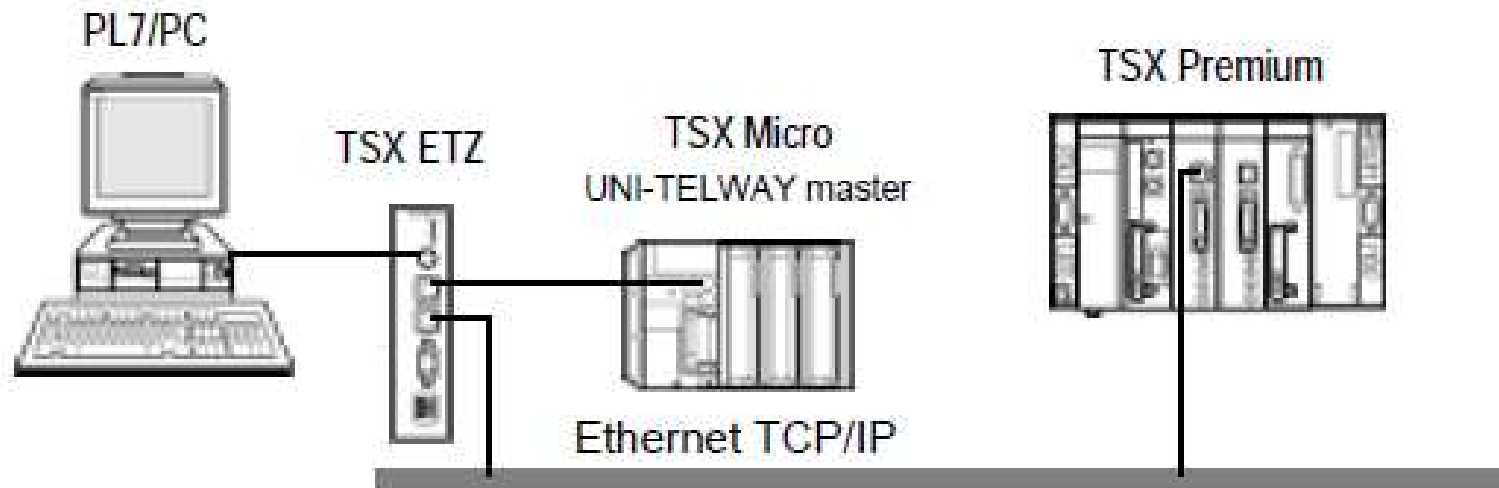


Modicon TSX Micro

Exemplo de UNI-TE communication entre TSXETZ510
e Modicon TSX Premium (PL7).

Arquitetura

- Ethernet:



ETHERNET communication principally targets the following applications:

- coordination between programmable PLCs,
- local or centralized supervision,
- communication with production management computers,
- communication with remote input/output.

The TCP/IP communication profile on ETHERNET, supported by the TSX ETZ modules, allows communication in:

- UNI-TE messaging with the X-WAY structure package,
- Modbus Messaging

PL7

- TSXETZ510 (Web-page):

ETZ - IP Configuration

Ethernet Interface IP Address

☒ Configurar ☐ Automatic configuration

IP address: 10 161 47 45

Subnetwork mask: 255 255 255 0

Gateway address: 0 0 0 0

XWAY Address

Network: 6 Station: 7

Network Connection

☒ Ethernet ☐ Modem

Ethernet configuration

☒ Ethernet II ☐ 802.3

Configuration of Connections

Connections: 4 ☒ Access Control

XWay Address IP Address Protocol Access Mode

New Edit Remove OK Cancel

	XWay	IP Address	Protocol	Access	Mode
1	6.23	10.161.47.4	UNITE	Allowed	MU
2	6.22	10.161.47.2	UNITE	Allowed	MU
3	6.5	10.161.47.44	UNITE	Allowed	MU
4	6.9	10.161.47.51	UNITE	Allowed	MU

Apply Reset

[Home](#) [Security](#) [IP Configuration](#) [Unitelway Configuration](#) [Automatic Configuration](#) [SNMP Configuration](#) [Reboot](#)

Endereço IP do módulo:
10.161.47.45

Endereço X-WAY:

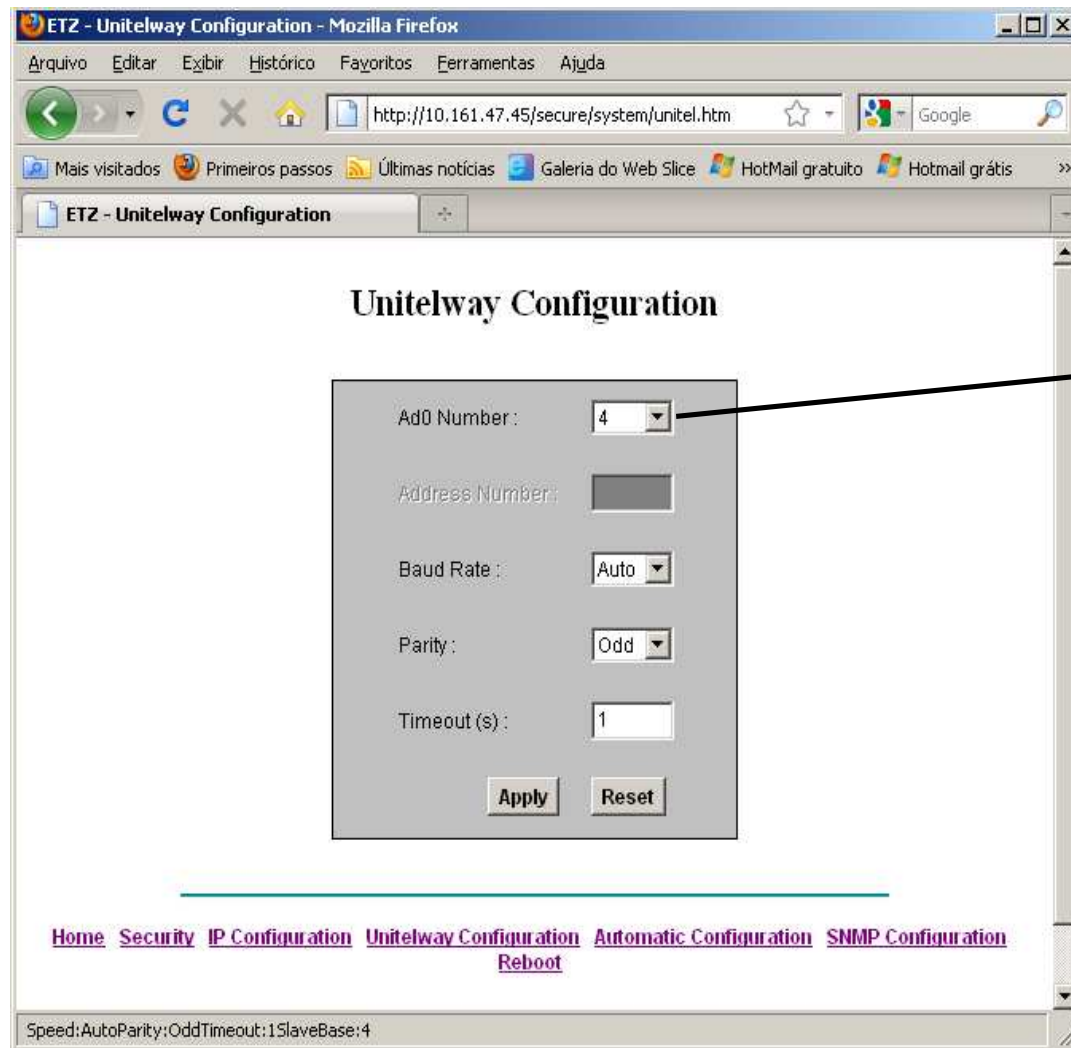
-Rede: 6

-Estação: 7

**Configuração das conexões
de acesso ao módulo.**

PL7

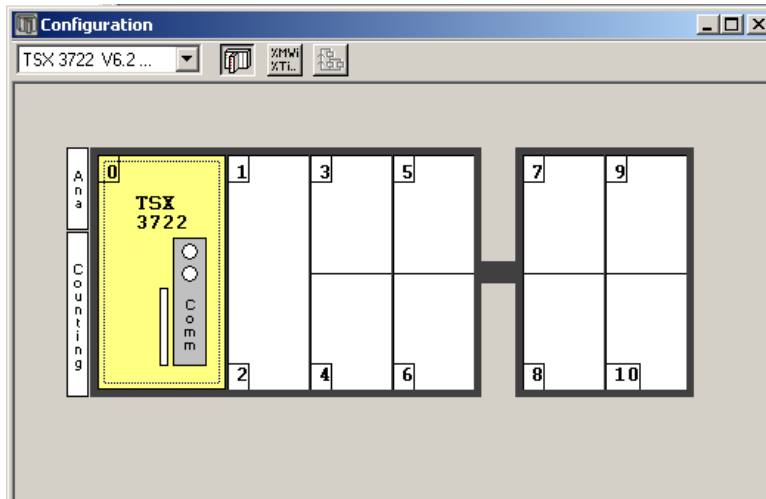
- TSXETZ510 (Web-page):



Endereço Unitelway para o módulo.

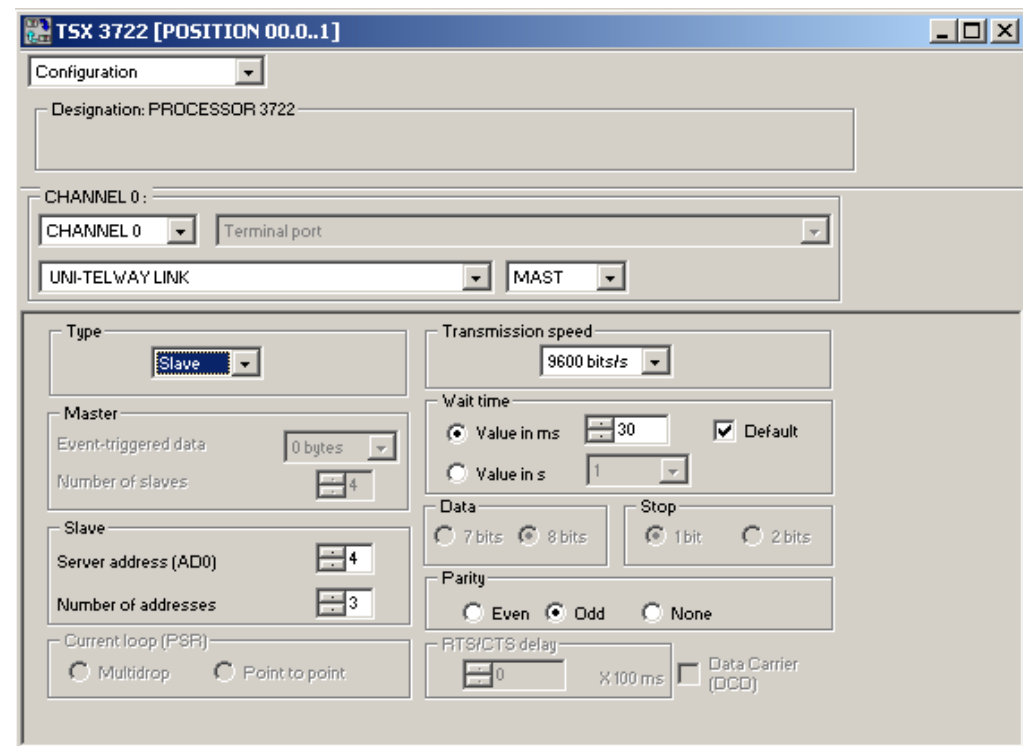
PL7

- Configuração de Hardware – TSX Micro (TSX37):



➤ Configuração da porta TER/AUX:

{
AD0 = 4
Parity = Odd



Configuration

Designation: PROCESSOR 3722

CHANNEL 0:

CHANNEL 0 Terminal port

UNI-TELWAY LINK MAST

Type: Slave

Transmission speed: 9600 bits/s

Wait time: Value in ms 30 (checked) Default

Value in s 1

Data: 7 bits 8 bits 1 bit 2 bits

Stop: 1 bit 2 bits

Parity: Even Odd (checked) None

RTS/CTS delay: 0 X 100 ms Data Carrier (DCD)

Master:

Event-triggered data: 0 bytes

Number of slaves: 4

Slave:

Server address (AD0): 4

Number of addresses: 3

Current loop (P&R): Multidrop Point to point

PL7

- SEND_REQ:

UNI-TE Communication

At a Glance

The UNI-TE utility allows the exchange of data on the Mast task.

Server Mode

In server mode, the TSX ETZ module is transparent with regard to UNI-TE requests from the PLC.

Client Mode

In client mode, it is possible to transmit the following UNI-TE request: **SEND_REQ()**. This request is sent to the TSX ETZ module's Address 1.
The following requests are addressed to remote devices to read and write variables:

Type of request	UNI-TE communication function
Reading of 1 or n bits	SEND_REQ(#36...)
Reading of 1 or n words	SEND_REQ(#36...)
Writing of 1 or n bits	SEND_REQ(#37...)
Writing of 1 or n words	SEND_REQ(#37...)
Refer to TSX DR NET Communication Reference manuals for the coding of UNI-TE requests.	

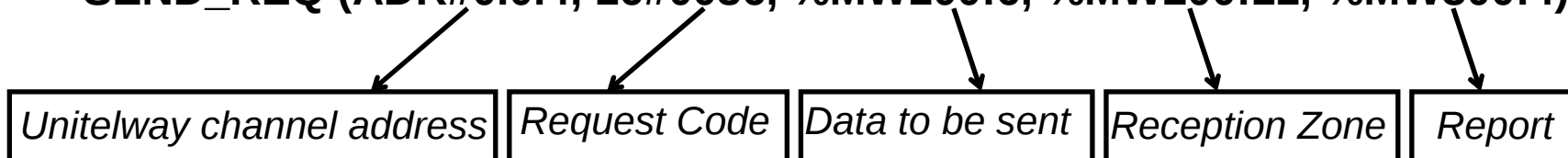
Note: Important: SEND_REQ request does not monitor coherence of input parameters (e.g.: checking between the number of facts to write and the size of the data buffer). The user should do this.

PL7

- SEND_REQ:

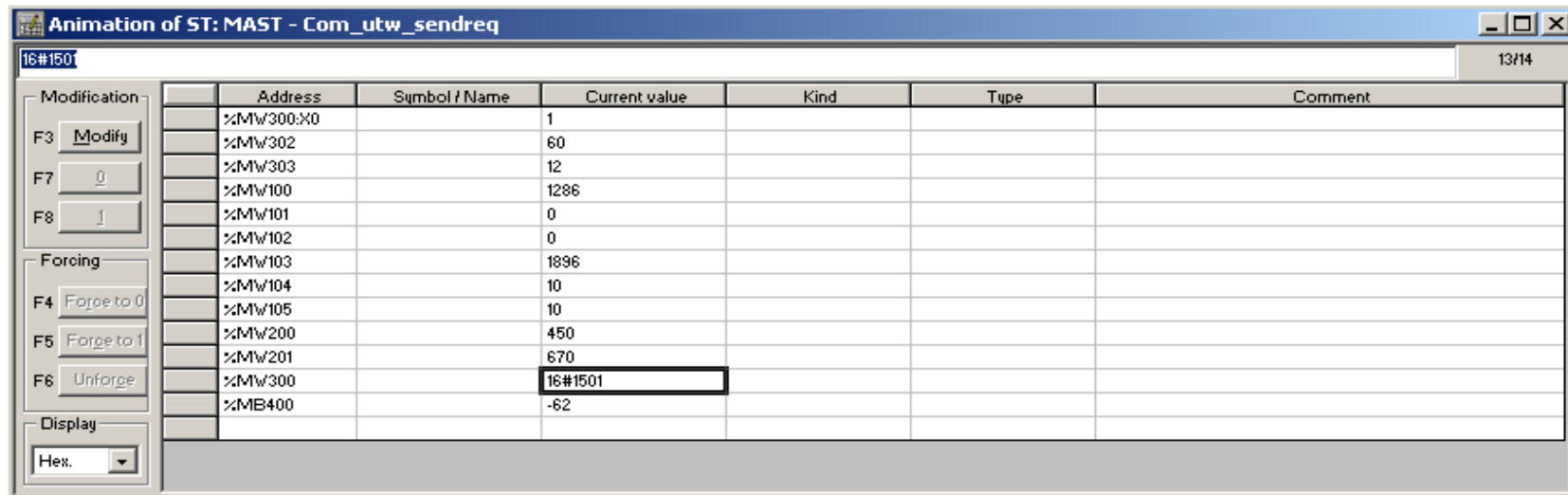
```
! (*ETZ in client mode*)  
(*request for the reading of TEN words (UNITE)*)  
IF NOT %MW300:X0 THEN %MW302:=60;(*time out by 100ms*)  
%MW303:=12;(*length in bytes of data to transmit*)  
%MW100:=16#0506;(*station-network: XWAY address (UNITE)*)  
%MW101:=16#0000;  
%MW102:=16#0000;  
%MW103:=16#0768;(*segment type: internal word*)  
%MW104:=10;(*address of the first word to read*)  
%MW105:=10;(*nb word to read*)  
SEND_REQ(ADR#0.0.4,16#0036,%MW100:6,%MW200:11,%MW300:4);  
ROR1_ARB(%MB400:21);  
END_IF;
```

SEND_REQ (ADR#0.0.4, 16#0036, %MW100:6, %MW200:11, %MW300:4);



PL7

- SEND_REQ – Animation Tables (TSX Micro):



16#1501 13/14

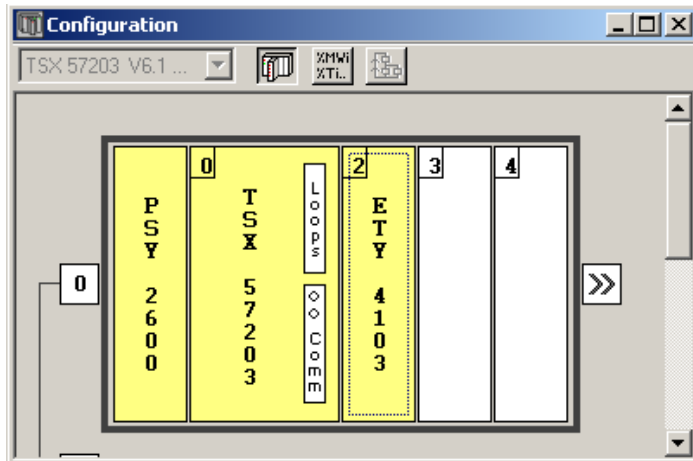
Modification	Address	Symbol / Name	Current value	Kind	Type	Comment
F3 Modify	%MW300:X0		1			
F7 0	%MW302		60			
F8 1	%MW303		12			
	%MW100		1286			
	%MW101		0			
	%MW102		0			
	%MW103		1896			
F4 Force to 0	%MW104		10			
F5 Force to 1	%MW105		10			
F6 Unforce	%MW200		450			
	%MW201		670			
	%MW300		16#1501			
	%MB400		-62			

Display
Hex.

Os valores lidos do TSX Premium estão alocados a partir da %MW200.

PL7

- Configuração de Hardware – TSX Premium (TSX57):



➤ Configuração do Endereço IP e X-WAY:

IP: 10.161.47.44

X-WAY: 6.5

TSX ETY 4103 [RACK 0 POSITION 2]

Configuration

Designation: TCP/IP 10/100 MODULE

Module IP address

IP address: 10, 161, 47, 44 Subnetwork mask: 255, 255, 255, 0 Gateway address: 0, 0, 0, 0

Module utilities

☒ IO Scanning ☐ Global data

☐ Address server ☐ Bandwidth

Messaging IO Scanning Address server SNMP Global Data Bandwidth Bridge

XWAY address

Network: 6 Station: 5

IP address configuration

☒ Configured

IP address: 10, 161, 47, 44 Subnetwork mask: 255, 255, 255, 0 Gateway address: 0, 0, 0, 0

☐ Client/Server configuration

Ethernet configuration

☒ Ethernet II ☐ 802.3

Connection configuration

Access control ☐

Xway Addr.	IP address	Protocol	Access	Mode
1		UNITE	☒	MULTI
2		UNITE	☒	MULTI
3		UNITE	☒	MULTI
4		UNITE	☒	MULTI
5		UNITE	☒	MULTI
6		UNITE	☒	MULTI
7		UNITE	☒	MULTI
8		UNITE	☒	MULTI
9		UNITE	☒	MULTI
10		UNITE	☒	MULTI
11		UNITE	☒	MULTI
12		UNITE	☒	MULTI

PL7

- SEND_REQ – Animation Tables (TSX Premium):

	Address	Symbol / Name	Current value	Kind	Type	Comment
	%MW10		450			
	%MW100		1			
	%MW101		2			
	%MW102		3			
	%MW103		49			
	%MW104		59			
	%MW105		69			
	%MW106		79			
	%MW107		89			
	%MW108		99			
	%MW109		199			
	%MW110		0			
	%MW111		670			

Os valores lidos pelo TSX Micro estão alocados a partir da %MW10.