



OPEN PROTOCOL FOR ELECTRIC NETWORKS

Document name
Last date modify
Last version

OpenWebNet_Community_2_device_v1_0_0_EN.doc
6/13/2006
1.0.0

Updating history

Version	Date	Author
1.0.0	05/19/2006	Bticino S.p.A. Direzione Marketing e Sviluppo Prodotti (Sviluppo Software Embedded) Via L. Manara, 4 Erba (CO) Italy www.myopen-bticino.it
Updating description: FIRST VERSION		

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1. External interface device (WHO = 13)

OpenWebNet frames list for device status.

1.1. DIMENSION table

R = READ: Data read allowed.

W = WRITE: Data write allowed.

0	Time	R/W
1	Date	R/W
10	IP Address	R
11	Net mask	R
12	MAC Address	R
15	Device Type	R
16	Firmware Version	R
19	Uptime	R
22	Date and Time	R/W
23	Kernel Version	R
24	Distribution Version	R

1.2. Allowed OPEN messages: Command session

1.2.1. TIME REQUEST command (WHAT = 0)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**0##	
Tcp/Ip Client ← Server	*#13**0*H*M*S*T## *##1##	H Hours composed of two digits (from 00 to 23) M Minutes composed of two digits (from 00 to 59) S Seconds composed of two digits (from 00 to 59)

		T Time zone composed of three digits. The first digit indicates if a zone is represented by positive or negative value (1 in case of negative values and 0 in case of positive value). The follow digits explain the hour zone. For example: 001 value stands for the Greenwich Meridian Time “plus” 1 hour (GMT+1); 102 value stands for the Greenwich Meridian Time “less” 2 hours (GMT-2).
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**0*H*M*S*T##	See upper comment.

1.2.2.DATE REQUEST command (WHAT = 1)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**1##	
Tcp/Ip Client ← Server	*#13**1*W*D*M*A## **1##	W Day of week composed of two digits (00 → Sunday, 06 → Saturday). D Day composed of two digits (from 01 to 31). M Month composed of two digits (from 01 to 12). Y Year composed of four digits.
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**0*W*D*M*Y##	See upper comment.

1.2.3.IP REQUEST command (WHAT = 10)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**10##	
Tcp/Ip Client ← Server	*#13**10*IP ¹ *IP ² *IP ³ *IP ⁴ # # **1##	IP address is a dimension composed by four values: *IP1*IP2*IP3*IP4* For example if an IP address is 192.168.10.1, the ten dimension becomes as follow: *192*168*10*1
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ←	*#13**10*IP ¹ *IP ² *IP ³ *IP ⁴ # #	See upper comment.

Server		
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1.2.4.NETMASK REQUEST command (WHAT = 11)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**11##	
Tcp/Ip Client ← Server	*#13**11*MASK ¹ *MASK ² *MASK ³ *MASK ⁴ ## **#1##	The Net mask is a dimension composed by four values: *MASK1*MASK2*MASK3*MASK4* For example if an IP address is 255.255.255.0. the eleven dimension becomes as follow: *255*255*255*0.
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**11*MASK ¹ *MASK ² *MASK ³ *MASK ⁴ ##	See upper comment.

1.2.5.MAC ADDRESS REQUEST command (WHAT = 12)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**12##	
Tcp/Ip Client ← Server	*#13**12*MAC ¹ *MAC ² *M AC ³ *MAC ⁴ *MAC ⁵ *MAC ⁶ # # **#1##	MAC Address is a dimension composed by six values: *MAC1*MAC2*MAC3*MAC4*MAC5*MA C6. Remember: the six values are specified in decimal system. Example: MAC Address= 00:10:FF:C8:10:10:01; OPEN code= *0*10*255*200*10*10*1
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**12*MAC ¹ *MAC ² *M AC ³ *MAC ⁴ *MAC ⁵ *MAC ⁶ # #	See upper comment.

1.2.6.MODEL REQUEST command (WHAT = 15)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**15##	
Tcp/Ip Client ← Server	*#13**15*MODELLO## **#1##	Model Request is a dimension composed by one value, where MODEL field value stands for the Web Server type: 2 MHServer 4 MH200

		6 F452 7 F452V 11 MHServer2 13 H4684
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**15*MODELLO##	See upper comment.

1.2.7.FIRMWARE VERSION REQUEST command (WHAT = 16)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**16##	
Tcp/Ip Client ← Server	*#13**16*V*R*B## *#*1##	Firmware Version Request is a dimension composed by three values, they stand for the device version that implements the OPEN server. These values represent: V Stands for version R Stands for release B Stands for build
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**16*V*R*B##	See upper comment.

1.2.8.UPTIME REQUEST command (WHAT = 19)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**19##	Uptime Request is a dimension composed by four values: It specifies the total time since last device start-up.
Tcp/Ip Client ← Server	*#13**19*D*H*M*S## *#*1##	Parameters: D Days from last start-up (composed by two digits from 00 to 31) H Hours from last start-up (composed by two digits from 00 to 23) M Minutes from last start-up (composed by two digits from 00 to 59) S Seconds from last start-up (composed by two digits from 00 to 59)
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**19*D*H*M*S##	See upper comment.

1.2.9. DATE&TIME REQUEST command (WHAT = 22)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**22##	
Tcp/Ip Client ← Server	*#13**22*H*m*S*T*W*D *M*Y## **1##	DATE&TIME Request is a dimension composed by eight values: H*m*S*T*W*D*M*Y. H Hours composed of two digits (from 00 to 23) m Minutes composed of two digits (from 00 to 59) S Seconds composed of two digits (from 00 to 59) T Time zone composed of three digits. The first digit indicates if a zone is represented by positive or negative value (1 in case of negative values and 0 in case of positive value). The follow digits explain the hour zone. For example: 001 value stands for the Greenwich Meridian Time “plus” 1 hour (GMT+1); 102 value stands for the Greenwich Meridian Time “less” 2 hours (GMT-2). W Day of week composed of two digits (00 → Sunday, 06 → Saturday). D Day composed of two digits (from 01 to 31). M Month composed of two digits (from 01 to 12). Y Year composed of four digits.
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**22*H*m*S*T*W*D *M*Y##	See upper comment.

1.2.10. KERNEL VERSION REQUEST command (WHAT = 23)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**23##	
Tcp/Ip Client ← Server	*#13**23*V*R*B## **1##	Kernel Version Request is a dimension composed by three values: V Stands for version R Stands for release B Stands for build
Monitor Session	Open Frame	Note
Tcp/Ip	*#13**23*V*R*B##	See upper comment.

Client_monitor ← Server		
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1.2.11. DISTRIBUTION VERSION REQUEST command (WHAT = 24)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**24##	
Tcp/Ip Client ← Server	*#13**24*V*R*B## **#1##	Distribution Version Request is a dimension composed by three values: V Stands for version R Stands for release B Stands for build
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**24*V*R*B##	See upper comment.

1.2.12. TIME SET command (WHAT = 0)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**#0*H*M*S*T##	H Hours composed of two digits (from 00 to 23) M Minutes composed of two digits (from 00 to 59) S Seconds composed of two digits (from 00 to 59) T Time zone composed of three digits. The first digit indicates if a zone is represented by positive or negative value (1 in case of negative values and 0 in case of positive value). The follow digits explain the hour zone. For example: 001 value stands for the Greenwich Meridian Time “plus” 1 hour (GMT+1); 102 value stands for the Greenwich Meridian Time “less” 2 hours (GMT-2).
Tcp/Ip Client ← Server	**#1##	
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**#0*H*M*S*T##	See upper comment.

1.2.13. DATE SET command (WHAT = 1)

Command Session	Open Frame	Note
Tcp/Ip: Client → RG	*#13**#1*D*G*M*A##	W Day of week composed of two digits (00 → Sunday, 06 → Saturday). D Day composed of two digits (from 01 to 31). M Month composed of two digits (from 01 to 12). Y Year composed of four digits.
Tcp/Ip Client ← RG	**#1##	
Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**#1*D*G*M*A##	See upper comment.

1.2.14. DATE&TIME SET command (WHAT = 22)

Command Session	Open Frame	Note
Tcp/Ip: Client → Server	*#13**#22*H*m*S*T*W* D*M*Y##	H Hours composed of two digits (from 00 to 23) m Minutes composed of two digits (from 00 to 59) S Seconds composed of two digits (from 00 to 59) T Time zone composed of three digits. The first digit indicates if a zone is represented by positive or negative value (1 in case of negative values and 0 in case of positive value). The follow digits explain the hour zone. For example: 001 value stands for the Greenwich Meridian Time “plus” 1 hour (GMT+1); 102 value stands for the Greenwich Meridian Time “less” 2 hours (GMT-2). W Day of week composed of two digits (00 → Sunday, 06 → Saturday). D Day composed of two digits (from 01 to 31). M Month composed of two digits (from 01 to 12). Y Year composed of four digits.
Tcp/Ip Client ← Server	**#1##	

Monitor Session	Open Frame	Note
Tcp/Ip Client_monitor ← Server	*#13**#22*H*m*S*T*W* D*M*Y##	See upper comment.