ET9500 QUICK START GUIDE

A WARNING *Risk of Fire or Electric Shock*

- Disconnect power at the circuit breaker(s) or disconnect switch(es) before installing or servicing.
- Installation and/or wiring must be in accordance with national and local electrical code requirements.

APPLICATION NOTE: Complete the installation process per the included Installation Instructions before configuring the ET9500.

Start Here!

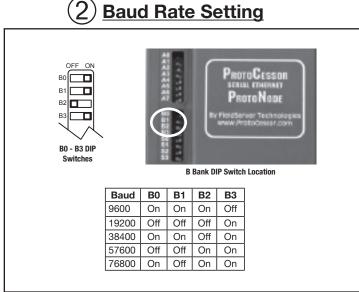
Please **write down the IP Address** of each of the ET90000 devices attached to the ET9500.

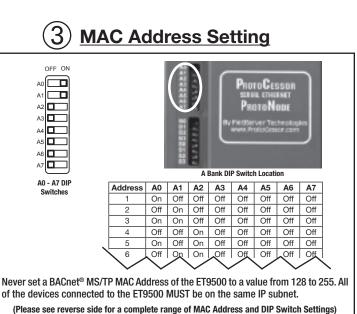
IMPORTANT: All of the devices and the BEMS/BAS connected to the ET9500 MUST be on the same IP subnet.

Follow the configuration steps on the chart to the right based on the protocol in use.

Configuration Steps

PROTOCOL IN USE	CONFIGURATION STEPS TO USE
BACnet [®] /IP	(1) > (5) > (6) > (7) > (8)
BACnet [®] MS/TP	(1) > (2) > (3) > (4) > (5) > (6) > (7) > (8)
Modbus TCP/IP	(1) > (5) > (6) > (7) > (8)
Modbus RTU	(1) > (2) > (4) > (5) > (6) > (7) > (8)
Metasys [®] N2	1 > 4 > 5 > 6 > 7 > 6





6 IP Address Setting for Field Network

- Set the IP address of the ET9500 to be the same IP subnet as the ET90000 device(s) and the BEMS/BAS.
- Open a PC web browser, enter the default IP address of the ET9500: **192.168.1.24** into the URL field to connect to the ET9500.
- To set IP Address for Field Network select the "Network Settings" Tab from the toolbar.



Record the IP address assigned to the ET9500 for future reference.





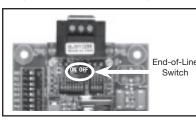
Connect the E19500 using a standard CA15 Ethernet cable to the same hub, switch or router that the ET90000 device(s) and the BEMS/BAS are connected to.



BMS RS-485	ProtoNode	Pin
Wiring	Pin #	Assignment
+	Pin 1	RS-485 +
-	Pin 2	RS-485 -
GND	Pin 3	RS-485 GND



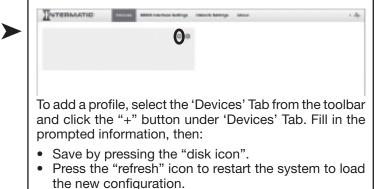
Connect the ET9500 to the RS-485 network wires at the 3-pin RS-485 (Field) connector on the top of ET9500.



If the ET9500 is the last device on the network segment, then the Endof-Line Termination Switch needs to be enabled. Remove housing cover and turn the EOL Switch to ON. Replace housing cover.

8 WEB Configurator

With a PC on the same IP subnet, type the IP address of the ET9500 into your web browser to open the WEB Configurator Application.



BACnet® is a registered trademark of ASHRAE. Metasys® is a registered trademark of Johnson Controls, Inc.



1 Protocol Selection

	\sim			
S0				
S1				
S2				
S3				
Ċ	OFF ON			
SO - S3 DIP Switches				

8289388 5895938	PLOTOCESSOR WRALL ETREMET PROTONODE By Thereformer Technologies www.Protocewer.com			
S Bank DIP Switch Location				
	S Bank DIP Switches			

	S Dalik DIF Switches				
Field Protocol	S0	S1	S2	S3	
BACnet/IP	Off	Off	Off	Off	
BACnet MS/TP	On	Off	Off	Off	
Modbus TCP/IP	Off	On	Off	Off	
Modbus RTU	On	On	Off	Off	
Metasys N2	Off	Off	On	Off	



- Reconnect power at the circuit breaker(s) or disconnect switch(es).
- If the ET9500 is <u>NOT</u> on the same IP subnet as the BEMS/BAS, please follow the steps below
- Connect a standard CAT5 Ethernet cable between the PC and ET9500.
- The Default IP Address of ET9500 is 192.168.1.24, Subnet Mask is 255.255.255.0. If the PC and ET9500 are on different IP Networks, assign a static IP Address to the PC on the 192.168.1.xxx network. (**NOTE:** xxx cannot equal 24.)

 If the ET9500 <u>IS</u> on the same IP subnet as the BEMS/ BAS, skip Step 6 and proceed to Step 7.

Congratulations!

You have completed the ET9500 configuration process.

If you are not able to locate the profile you just created on your BEMS/BAS workstation display, please check the information in the "BEMS Interface Settings" and "Network Settings" Tabs in your Web Configurator and the "Device Instance Setting" on the reverse page of this document.

If you are still unable to locate the profile you created after adjusting these settings, please call our technical support team at 815-675-7000 or send an e-mail to us: CustomerSupport@intermatic.com.

"A" Bank DIP Switch Settings

				
Address A0 A1 A2 A3 A4 A5 A6 A7	Address A0 A1 A2 A3 A4 A5 A6 A7	Address A0 A1 A2 A3 A4 A5 A6 A7	Address A0 A1 A2 A3 A4 A5 A6 A7	Address A0 A1 A2 A3 A4 A5 A6 A7
1 On Off Off Off Off Off Off Off Off	47 On On On On Off On Off Off	93 On Off On On On Off On Off	141 On Off On On Off Off Off On	189 On Off On On On On Off On
2 Off On Off Off Off Off Off Off	48 Off Off Off Off On On Off Off	94 Off On On On On Off On Off	142 Off On On On Off Off Off On	190 Off On On On On Off On
3 On On Off Off Off Off Off Off Off	49 On Off Off Off On On Off Off	95 On On On On On Off On Off	143 On On On On Off Off Off On	191 On On On On On On Off On
4 Off Off On Off Off Off Off Off	50 Off On Off Off On On Off Off	96 Off Off Off Off Off On On Off	144 Off Off Off Off On Off Off On	192 Off Off Off Off Off On On
5 On Off On Off Off Off Off Off	51 On On Off Off On On Off Off	97 On Off Off Off Off On On Off	145 On Off Off Off On Off Off On	193 On Off Off Off Off Off On On
6 Off On On Off Off Off Off Off	52 Off Off On Off On Off Off Off	98 Off On Off Off Off On On Off	146 Off On Off Off On Off Off On	194 Off On Off Off Off Off On On
7 On On On Off Off Off Off Off	53 On Off On Off On On Off Off	99 On On Off Off Off On On Off	147 On On Off Off On Off Off On	195 On On Off Off Off Off On On
8 Off Off Off On Off Off Off Off	54 Off On On Off On On Off Off	100 Off Off On Off Off On On Off	148 Off Off On Off On Off Off On	196 Off Off On Off Off Off On On
9 On Off Off On Off Off Off Off	55 On On On Off On On Off Off	101 On Off On Off Off On On Off	149 On Off On Off On Off Off On	197 On Off On Off Off Off On On
10 Off On Off On Off Off Off Off	56 Off Off Off On On On Off Off	102 Off On On Off Off On On Off	150 Off On On Off On Off Off On	198 Off On On Off Off Off On On
11 On On Off On Off Off Off Off	57 On Off Off On On On Off Off	103 On On On Off Off On On Off	151 On On On Off On Off Off On	199 On On On Off Off Off On On
	57 61<	103 Off Off Off On Off On Off Off	152 Off Off Off On On Off Off On	200 Off Off Off On Off Off On On
13 On Off On On Off Off Off Off	59 On On Off On On Off Off	105 On Off Off On Off On Off	153 On Off Off On On Off Off On	201 On Off Off On Off Off On On
14 Off On On On Off Off Off Off	60 Off Off On On On Off Off	106 Off On Off On Off On On Off	154 Off On Off On On Off Off On	202 Off On Off On Off Off On On
15 On On On On Off Off Off Off	61 On Off On On On On Off Off	107 On On Off On Off On Off On Off	155 On On Off On On Off Off On	203 On On Off On Off Off On On
16 Off Off Off Off On Off Off Off	62 Off On On On On On Off Off	108 Off Off On On Off On On Off	156 Off Off On On On Off Off On	204 Off Off On On Off Off On On
17 On Off Off Off On Off Off Off	63 On On On On On On Off Off	109 On Off On On Off On On Off	157 On Off On On On Off Off On	205 On Off On On Off Off On On
18 Off On Off Off On Off Off Off	64 Off Off Off Off Off Off On Off	110 Off On On On Off On On Off	158 Off On On On On Off Off On	206 Off On On On Off Off On On
19 On On Off Off On Off Off Off	65 On Off Off Off Off Off On Off	111 On On On On Off On On Off	159 On On On On On Off Off On	207 On On On On Off Off On On
20 Off Off On Off On Off Off Off	66 Off On Off Off Off Off On Off	112 Off Off Off Off On On On Off	160 Off Off Off Off Off On Off On	208 Off Off Off Off On Off On On
21 On Off On Off On Off Off Off	67 On On Off Off Off Off On Off	113 On Off Off Off On On On Off	161 On Off Off Off Off On Off On	209 On Off Off Off On Off On On
22 Off On On Off On Off Off Off	68 Off Off On Off Off Off On Off	114 Off On Off Off On On On	162 Off On Off Off Off On Off On	210 Off On Off Off On Off On On
22 On On On On On On Off On Off Off	60 01<	115 On On Off Off On On Off	162 On On Off Off Off On On Off On Off	211 On On Off Off On Off On On
25 On Off Off On On Off Off Off	71 On On On Off Off Off On Off	117 On Off On Off On On On Off	165 On Off On Off Off On Off On	213 On Off On Off On Off On On
26 Off On Off On On Off Off Off	72 Off Off Off On Off Off On Off	118 Off On On Off On On Off Of	166 Off On On Off Off On Off On	214 Off On On Off On Off On On
27 On On Off On On Off Off Off	73 On Off Off On Off Off On Off	119 On On On Off On On Off Of	167 On On On Off Off On Off On	215 On On On Off On Off On On
28 Off Off On On On Off Off Off	74 Off On Off On Off Off On Off	120 Off Off Off On On On Off	168 Off Off Off On Off On Off On	216 Off Off Off On On Off On On
29 On Off On On On Off Off Off	75 On On Off On Off Off On Off	121 On Off Off On On On Off	169 On Off Off On Off On Off On	217 On Off Off On On Off On On
30 Off On On On On Off Off Off	76 Off Off On On Off Off On Off	122 Off On Off On On On On Off	170 Off On Off On Off On Off On	218 Off On Off On On Off On On
31 On On On On On Off Off Off	77 On Off On On Off Off On Off	123 On On Off On On On Off	171 On On Off On Off On Off On	219 On On Off On On Off On On
32 Off Off Off Off Off On Off Off	78 Off On On On Off Off On Off	124 Off Off On On On On On Off	172 Off Off On On Off On Off On	220 Off Off On On On Off On On
33 On Off Off Off Off On Off Off	79 On On On On Off Off On Off	125 On Off On On On On Off	173 On Off On On Off On Off On	221 On Off On On On Off On On
34 Off On Off Off Off On Off Off	80 Off Off Off Off On Off On Off	126 Off On On On On On Off	174 Off On On On Off On Off On	222 Off On On On Off On On
35 On On Off Off Off On Off Off	81 On Off Off Off On Off On Off	127 On	175 On On On On Off On Off	223 On
36 Off Off On Off Off On Off Off Off	82 Off On Off Off On Off On Off	127 Off Off Off Off Off Off 128 Off Off Off Off Off Off Off	173 Off Off <th>224 Off Off Off Off Off Off On On On</th>	224 Off Off Off Off Off Off On On On
		128 On On On On On On 129 On Off Off Off Off Off Off	178 On Off Off Off Off On Off Off On 177 On Off Off Off On On Off On	2224 On On On On On On 225 On Off Off Off Off Off On On
38 Off On On Off Off On Off Off		130 Off On Off Off Off Off Off On		226 Off On Off Off Off On On On
39 On On On Off Off On Off Off	85 On Off On Off On Off On Off	131 On On Off Off Off Off Off On	179 On On Off Off On On Off On	227 On On Off Off Off On On On
40 Off Off Off On Off On Off Off	86 Off On On Off On Off On Off	132 Off Off On Off Off Off Off On	180 Off Off On Off On On Off On	228 Off Off On Off Off On On On
41 On Off Off On Off On Off Off Off	87 On On On Off On Off On Off	133 On Off On Off Off Off Off On	181 On Off On Off On On Off On	229 On Off On Off Off On On On
42 Off On Off On Off On Off Off Off	88 Off Off Off On On Off On Off	134 Off On On Off Off Off Off On	182 Off On On Off On On Off On	230 Off On On Off Off On On On
43 On On Off On Off On Off Off Off	89 On Off Off On On Off On Off	135 On On On Off Off Off Off On	183 On On On Off On On Off On	231 On On On Off Off On On On
44 Off Off On On Off On Off Off	90 Off On Off On On Off On Off	136 Off Off Off On Off Off Off On	184 Off Off Off On On On Off On	232 Off Off Off On Off On On On
45 On Off On On Off On Off Off	91 On On Off On On Off On Off	137 On Off Off On Off Off Off On	185 On Off Off On On On Off On	233 On Off Off On Off On On On
46 Off On On On Off On Off Off	92 Off Off On On On Off On Off	138 Off On Off On Off Off Off On	186 Off On Off On On Off On	234 Off On Off On Off On On On
		139 On On Off On Off Off Off Off On	187 On On Off On On On Off On	235 On On Off On Off On On
		140 Off Off On On Off Off On	107 011 011 011 011 011 011 011 188 Off Off On On On On Off On	236 Off Off On On Off On On <th< td=""></th<>

Please refer to the ET9500 BEMS Interface box Configuration Guide that can be found at: <u>www.intermatic.com</u> for additional information on how to configure the ET9500 and the ET90000 communication.

NTERMATIC

Address	A0	A1	A2	A3	A4	A5	A6	A7
237	On	Off	On	On	Off	On	On	On
238	Off	On	On	On	Off	On	On	On
239	On	On	On	On	Off	On	On	On
240	Off	Off	Off	Off	On	On	On	On
241	On	Off	Off	Off	On	On	On	On
242	Off	On	Off	Off	On	On	On	On
243	On	On	Off	Off	On	On	On	On
244	Off	Off	On	Off	On	On	On	On
245	On	Off	On	Off	On	On	On	On
246	Off	On	On	Off	On	On	On	On
247	On	On	On	Off	On	On	On	On
248	Off	Off	Off	On	On	On	On	On
249	On	Off	Off	On	On	On	On	On
250	Off	On	Off	On	On	On	On	On
251	On	On	Off	On	On	On	On	On
252	Off	Off	On	On	On	On	On	On
253	On	Off	On	On	On	On	On	On
254	Off	On	On	On	On	On	On	On
255	On	On	On	On	On	On	On	On

Device Instance Setting

• After setting your PC to be on the same subnet as the ET9500, open a web browser on your PC and enter the IP address of the ET9500; the default address is 192.168.1.24.

Setting the Device Instance for **BACnet/IP** and **BACnet MS/TP** Network

- The BACnet Device Instances will be calculated by adding the Node_Offset (default value is 90,000) to the unique device's Node ID.
- The Node_Offset is found in the Web Configurator.
- The BACnet Device Instance can range from 1 to 4,194,303.
- To assign specific Device Instance values, change the Node_Offset value.

Example:

- o Node_Offset value (default) = 90,000
- o Device 1 has a unique Node-ID of 1
- o Device 2 has a unique Node-ID of 22
- o Device 3 has a unique Node-ID of 33
- o Given that: Device Instance = Node_Offset + unique Node_ID
- o Device Instance, Device 1 = 90,000 + 1 = 90,001
- o Device Instance, Device 2 = 90,000 + 22 = 90,022
- o Device Instance, Device 3 = 90,000 + 33 = 90,033