

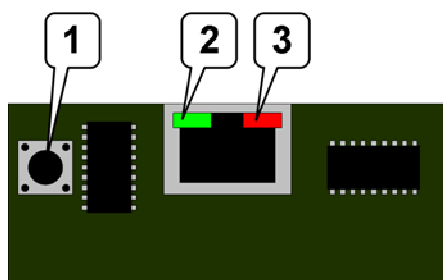


# **TCP/IP EXPANSION MODULE FOR VTS CONTROL BOXES OF TYPES VS...uPC**

compatibility: VTS Application from v\_1.0.5; BIOS from 5.14

doc. no. **00.155.930**

## TCP/IP EXPANSION MODULE



1. Button enabling the service mode
2. Status LED
2. Connection LED

**Note! The module is sensitive to static discharges. Take extreme care when transporting, handling and installation of the TCP/IP Expansion Module. Avoid touching the module and the electronic parts on the PCB.**

**Note! Always use supplied plastic clamp to assembly the expansion module to the controller board. Otherwise the module and the controller may suffer from mechanical or electrical damage from cable tension and vibrations.**

### CONNECTION

**Type:** 10Mbps Ethernet

#### Default settings:

IP: 172.16.0.1

Net mask: 255.255.0.0

Port for Modbus IP connection: 502

#### Default logon data:

user: **root** password: **froot**

user: **httpadmin** password: **fhttpadmin**

user: **carel** password: **fcarel**

user: **guest** password: **fguest**

### ENTERING SERVICE MODE

Follow the steps strictly.

1. Turn off the power from the controller
2. Press and hold the button [1]
3. Turn on the power still holding the button [1] and remain like that approx. 20 seconds. After that time the Status LED [2] will start blinking slowly in RED.
4. Release the button just when red blinking appears.  
*Note! If released too late (after 3rd blink) the module will not enter service mode.*
5. Observe the Status LED [2]. If steps 1..4 were done properly, there will be 3 fast blinks in RED to confirm entering the service mode.
6. Wait another ~50 seconds and then connect.
7. For the first time use login: **admin** and password: **fadmin** to enter the module. To enable normal connecting to the controller, set the main IP address in settings page.

### ACCESSING THE DATA VIA MODBUS IP



If the IP and mask are set properly in service mode, the Modbus IP Server can be accessed directly. Modbus IP communication is activated by default.

#### **DATA DESCRIPTION**

##### **Multiplier**

0.1 - means that fixed point analog value is transmitted as integer, e.g. 10.4 is transmitted as 104

1.0 - means that value is either native integer or boolean and doesn't need any calculation

##### **Def**

Default value

##### **Mem type**

X - RAM memory, lost after power-down

T - permanent memory, not sensitive to power loss

***NOTE! T-memory has limited number of write cycles that can be accepted (approx. 300k cycles). Avoid unnecessary write. Check your BMS supervisory application for accidental write forcing to the controller!***

##### **BMS Type**

Analog - fixed point analog value, transmitted as Integer, signed

Integer - native Integer, signed

Digital - boolean

##### **BMS Index**

Data point number for Carel webserver

##### **Modbus Index**

Register address in Modbus IP connection

##### **BMS Dir**

Out - read-only data

In/Out - data intended to read and/or write values

***NOTE! Mind the write cycle limitations of T-memory!***



Variable	Description	Unit	Min	Max	Multiplier	Def	Mem type	Bms Type	Bms Index	Modbus Index	Bms Dir
gFan_ExhFreqRef	Freq reference for Exhaust (depends on Low/Econo/Comf mode)	Hz	001.0	100.0	0.1	5.0	X	Analog	1	1	Out
gFan_ExhOutputCurr_1	Output current Exhaust FC 1	A	000.0	999.9	0.1	0.0	X	Analog	2	2	Out
gFan_ExhOutputCurr_2	Output current Exhaust FC 2	A	000.0	999.9	0.1	0.0	X	Analog	3	3	Out
gFan_ExhOutputCurr_3	Output current Exhaust FC 3	A	000.0	999.9	0.1	0.0	X	Analog	4	4	Out
gFan_ExhOutputCurr_4	Output current Exhaust FC 4	A	000.0	999.9	0.1	0.0	X	Analog	5	5	Out
gFan_ExhOutputFreq_1	Output freq Exhaust FC 1	Hz	000.0	999.9	0.1	0.0	X	Analog	6	6	Out
gFan_ExhOutputFreq_2	Output freq Exhaust FC 2	Hz	000.0	999.9	0.1	0.0	X	Analog	7	7	Out
gFan_ExhOutputFreq_3	Output freq Exhaust FC 3	Hz	000.0	999.9	0.1	0.0	X	Analog	8	8	Out
gFan_ExhOutputFreq_4	Output freq Exhaust FC 4	Hz	000.0	999.9	0.1	0.0	X	Analog	9	9	Out
gFan_SupFreqRef	Freq reference for Supply (depends on Low/Econo/Comf mode)	Hz	001.0	100.0	0.1	5.0	X	Analog	10	10	Out
gFan_SupOutputCurr_1	Output current Supply FC 1	A	000.0	999.9	0.1	0.0	X	Analog	11	11	Out
gFan_SupOutputCurr_2	Output current Supply FC 2	A	000.0	999.9	0.1	0.0	X	Analog	12	12	Out
gFan_SupOutputCurr_3	Output current Supply FC 3	A	000.0	999.9	0.1	0.0	X	Analog	13	13	Out
gFan_SupOutputCurr_4	Output current Supply FC 4	A	000.0	999.9	0.1	0.0	X	Analog	14	14	Out
gFan_SupOutputFreq_1	Output freq Supply FC 1	Hz	000.0	999.9	0.1	0.0	X	Analog	15	15	Out
gFan_SupOutputFreq_2	Output freq Supply FC 2	Hz	000.0	999.9	0.1	0.0	X	Analog	16	16	Out
gFan_SupOutputFreq_3	Output freq Supply FC 3	Hz	000.0	999.9	0.1	0.0	X	Analog	17	17	Out
gFan_SupOutputFreq_4	Output freq Supply FC 4	Hz	000.0	999.9	0.1	0.0	X	Analog	18	18	Out
gInputAI_1_Sup	Analog input AI 1 as supply sensor	°C	-99.9	99.9	0.1	0.0	X	Analog	19	19	Out



gInputAI_2_Exh	Analog input AI 2 as exhaust sensor	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>20</b>	<b>20</b>	Out
gInputAI_2_Room	Analog input AI 2 as room sensor	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>21</b>	<b>21</b>	Out
gInputAI_3_Out	Analog input AI 3 as external sensor	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>22</b>	<b>22</b>	Out
gInputAI_4_Reco	Analog input AI 4 as after recovery sensor	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>23</b>	<b>23</b>	Out
gInputAI_5_RetHW	Analog input AI 5 as back water of heating coil	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>24</b>	<b>24</b>	Out
gInputAI_6_PHHW	Analog input AI 6 as air after pre-heating coil	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>25</b>	<b>25</b>	Out
gInputAI_7_RetPHHW	Analog input AI 7 as back water of pre-heating coil	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>26</b>	<b>26</b>	Out
gInputAI_7_User	Analog input AI 7 as universal AI	%	-999.9	999.9	0.1	0.0	X	Analog	<b>27</b>	<b>27</b>	Out
gInputAI_MainSensor	Analog input Main sensor (depends on application settings)	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>28</b>	<b>28</b>	Out
gInputAI_Offset_1	Offset for AI 1	K	-10.0	10.0	0.1	0.0	T	Analog	<b>29</b>	<b>29</b>	In/Out
gInputAI_Offset_2	Offset for AI 2	K	-10.0	10.0	0.1	0.0	T	Analog	<b>30</b>	<b>30</b>	In/Out
gInputAI_Offset_3	Offset for AI 3	K	-10.0	10.0	0.1	0.0	T	Analog	<b>31</b>	<b>31</b>	In/Out
gInputAI_Offset_4	Offset for AI 4	K	-10.0	10.0	0.1	0.0	T	Analog	<b>32</b>	<b>32</b>	In/Out
gInputAI_Offset_5	Offset for AI 5	K	-10.0	10.0	0.1	0.0	T	Analog	<b>33</b>	<b>33</b>	In/Out
gInputAI_Offset_6	Offset for AI 6	K	-10.0	10.0	0.1	0.0	T	Analog	<b>34</b>	<b>34</b>	In/Out
gInputAI_Offset_7	Offset for AI 7	K	-10.0	10.0	0.1	0.0	T	Analog	<b>35</b>	<b>35</b>	In/Out
gLimit_DZ_Comf	Deadzone for temp regulation in Comfort mode	K	01.0	10.0	0.1	1.0	T	Analog	<b>36</b>	<b>36</b>	In/Out
gLimit_DZ_Eco	Deadzone for temp regulation in Econo mode	K	01.0	10.0	0.1	2.0	T	Analog	<b>37</b>	<b>37</b>	In/Out
gLimit_DZ_Low	Deadzone for temp regulation in Low mode	K	01.0	10.0	0.1	4.0	T	Analog	<b>38</b>	<b>38</b>	In/Out
gLimit_FireTempLimit	Temp limit for fire alarm detection in supply / exhaust air	°C	70.0	97.0	0.1	7.0	T	Analog	<b>39</b>	<b>39</b>	In/Out
gLimit_MinOutTempForClg	Min out temp to enable cooling function	°C	10.0	25.0	0.1	16.0	T	Analog	<b>40</b>	<b>40</b>	Out
gLimit_MinOutTempForPumpHW	External temp for starting heating coil circulation pump	°C	00.0	15.0	0.1	5.0	T	Analog	<b>41</b>	<b>41</b>	Out



gLimit_MinOutTempForPumpPHHW	External temp for starting pre-heating circulation pump	°C	-50.0	15.0	0.1	5.0	T	Analog	<b>42</b>	<b>42</b>	Out
gLimit_MixCmbrAtComf	Min fresh air limit for mixing chamber in Comfort mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>43</b>	<b>43</b>	In/Out
gLimit_MixCmbrAtEcono	Min fresh air limit for mixing chamber in Econo mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>44</b>	<b>44</b>	In/Out
gLimit_MixCmbrAtLow	Min fresh air limit for mixing chamber in Low mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>45</b>	<b>45</b>	In/Out
gLimit_RRGFreqHi	High freq limit for RRG frequency converter	Hz	40.0	70.0	0.1	5.0	T	Analog	<b>46</b>	<b>46</b>	In/Out
gLimit_RRGFreqLo	Low freq limit for RRG frequency converter	Hz	10.0	25.0	0.1	5.0	T	Analog	<b>47</b>	<b>47</b>	In/Out
gLimit_SupTempHi	High limit for supply air temperature	°C	05.0	40.0	0.1	30.0	T	Analog	<b>48</b>	<b>48</b>	In/Out
gLimit_SupTempLo	Low limit for supply air temperature	°C	05.0	40.0	0.1	15.0	T	Analog	<b>49</b>	<b>49</b>	In/Out
gOutputAO_1	Analog output 1 value	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>50</b>	<b>50</b>	Out
gOutputAO_2	Analog output 2 value	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>51</b>	<b>51</b>	Out
gOutputAO_3	Analog output 3 value	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>52</b>	<b>52</b>	Out
gOutputAO_Clg	Cooling rate from regulator loop	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>53</b>	<b>53</b>	Out
gOutputAO_Htg	Heating rate from regulator loop	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>54</b>	<b>54</b>	Out
gOutputAO_PreHtg	Pre-heating rate from regulator loop	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>55</b>	<b>55</b>	Out
gOutputAO_Reco	Recovery rate from regulator loop	%	-3276.8	3276.7	0.1	0.0	X	Analog	<b>56</b>	<b>56</b>	Out
gRRG_FreqRef	Freq reference for RRG (depends on recovery rate PI regulator)	Hz	000.0	999.9	0.1	0.0	X	Analog	<b>57</b>	<b>57</b>	Out
gRRG_OutputCurr	Output current RRG freq converter	A	000.0	999.9	0.1	0.0	X	Analog	<b>58</b>	<b>58</b>	Out
gRRG_OutputFreq	Output freq RRG freq converter	Hz	000.0	999.9	0.1	0.0	X	Analog	<b>59</b>	<b>59</b>	Out
gSet_ManMixCmbrAtComf	Manual recirculation rate for Comfort mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>60</b>	<b>60</b>	In/Out
gSet_ManMixCmbrAtEcono	Manual recirculation rate for Econo mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>61</b>	<b>61</b>	In/Out
gSet_ManMixCmbrAtLow	Manual recirculation rate for Low mode	%	000.0	100.0	0.1	30.0	T	Analog	<b>62</b>	<b>62</b>	In/Out
gSet_ManSetpFreqExh_1	Setpoint for Exhaust fan in Low mode	%	010.0	100.0	0.1	30.0	T	Analog	<b>63</b>	<b>63</b>	In/Out



gSet_ManSetpFreqExh_2	Setpoint for Exhaust fan in Econo mode	%	010.0	100.0	0.1	60.0	T	Analog	<b>64</b>	<b>64</b>	In/Out
gSet_ManSetpFreqExh_3	Setpoint for Exhaust fan in Comfort mode	%	010.0	100.0	0.1	90.0	T	Analog	<b>65</b>	<b>65</b>	In/Out
gSet_ManSetpFreqSup_1	Setpoint for Supply fan in Low mode	%	010.0	100.0	0.1	30.0	T	Analog	<b>66</b>	<b>66</b>	In/Out
gSet_ManSetpFreqSup_2	Setpoint for Supply fan in Econo mode	%	010.0	100.0	0.1	60.0	T	Analog	<b>67</b>	<b>67</b>	In/Out
gSet_ManSetpFreqSup_3	Setpoint for Supply fan in Comfort mode	%	010.0	100.0	0.1	90.0	T	Analog	<b>68</b>	<b>68</b>	In/Out
gSet_ManSetpParametricComf	Setpoint for parametric PI air volume regulator in Comfort mode	%	-100.0	100.0	0.1	0.0	T	Analog	<b>69</b>	<b>69</b>	In/Out
gSet_ManSetpParametricEco	Setpoint for parametric PI air volume regulator in Econo mode	%	-100.0	100.0	0.1	0.0	T	Analog	<b>70</b>	<b>70</b>	In/Out
gSet_ManSetpParametricLow	Setpoint for parametric PI air volume regulator in Low mode	%	-100.0	100.0	0.1	0.0	T	Analog	<b>71</b>	<b>71</b>	In/Out
gThTune_TempSensor	Temperature readout from HMI Basic uPC (thTune device)	°C	-99.9	99.9	0.1	0.0	X	Analog	<b>72</b>	<b>72</b>	Out
gTSetp_RecoFrostProt	Setpoint for recovery system anti-freezing protection	°C	-15.0	10.0	0.1	5.0	T	Analog	<b>73</b>	<b>73</b>	In/Out
gTSetp_Main	Main temperature setpoint	°C	-99.9	99.9	0.1	20.0	T	Analog	<b>74</b>	<b>74</b>	In/Out
gTSetp_11	Temperature setpoint for uPC calendar day 1 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>75</b>	<b>75</b>	In/Out
gTSetp_12	Temperature setpoint for uPC calendar day 1 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>76</b>	<b>76</b>	In/Out
gTSetp_13	Temperature setpoint for uPC calendar day 1 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>77</b>	<b>77</b>	In/Out
gTSetp_14	Temperature setpoint for uPC calendar day 1 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>78</b>	<b>78</b>	In/Out
gTSetp_15	Temperature setpoint for uPC calendar day 1 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>79</b>	<b>79</b>	In/Out
gTSetp_16	Temperature setpoint for uPC calendar day 1 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>80</b>	<b>80</b>	In/Out
gTSetp_21	Temperature setpoint for uPC calendar day 2 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>81</b>	<b>81</b>	In/Out
gTSetp_22	Temperature setpoint for uPC calendar day 2 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>82</b>	<b>82</b>	In/Out
gTSetp_23	Temperature setpoint for uPC calendar day 2 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>83</b>	<b>83</b>	In/Out
gTSetp_24	Temperature setpoint for uPC calendar day 2 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>84</b>	<b>84</b>	In/Out
gTSetp_25	Temperature setpoint for uPC calendar day 2 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>85</b>	<b>85</b>	In/Out



gTSetp_26	Temperature setpoint for uPC calendar day 2 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>86</b>	<b>86</b>	In/Out
gTSetp_31	Temperature setpoint for uPC calendar day 3 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>87</b>	<b>87</b>	In/Out
gTSetp_32	Temperature setpoint for uPC calendar day 3 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>88</b>	<b>88</b>	In/Out
gTSetp_33	Temperature setpoint for uPC calendar day 3 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>89</b>	<b>89</b>	In/Out
gTSetp_34	Temperature setpoint for uPC calendar day 3 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>90</b>	<b>90</b>	In/Out
gTSetp_35	Temperature setpoint for uPC calendar day 3 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>91</b>	<b>91</b>	In/Out
gTSetp_36	Temperature setpoint for uPC calendar day 3 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>92</b>	<b>92</b>	In/Out
gTSetp_41	Temperature setpoint for uPC calendar day 4 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>93</b>	<b>93</b>	In/Out
gTSetp_42	Temperature setpoint for uPC calendar day 4 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>94</b>	<b>94</b>	In/Out
gTSetp_43	Temperature setpoint for uPC calendar day 4 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>95</b>	<b>95</b>	In/Out
gTSetp_44	Temperature setpoint for uPC calendar day 4 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>96</b>	<b>96</b>	In/Out
gTSetp_45	Temperature setpoint for uPC calendar day 4 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>97</b>	<b>97</b>	In/Out
gTSetp_46	Temperature setpoint for uPC calendar day 4 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>98</b>	<b>98</b>	In/Out
gTSetp_51	Temperature setpoint for uPC calendar day 5 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>99</b>	<b>99</b>	In/Out
gTSetp_52	Temperature setpoint for uPC calendar day 5 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>100</b>	<b>100</b>	In/Out
gTSetp_53	Temperature setpoint for uPC calendar day 5 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>101</b>	<b>101</b>	In/Out
gTSetp_54	Temperature setpoint for uPC calendar day 5 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>102</b>	<b>102</b>	In/Out
gTSetp_55	Temperature setpoint for uPC calendar day 5 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>103</b>	<b>103</b>	In/Out
gTSetp_56	Temperature setpoint for uPC calendar day 5 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>104</b>	<b>104</b>	In/Out
gTSetp_61	Temperature setpoint for uPC calendar day 6 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>105</b>	<b>105</b>	In/Out
gTSetp_62	Temperature setpoint for uPC calendar day 6 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>106</b>	<b>106</b>	In/Out
gTSetp_63	Temperature setpoint for uPC calendar day 6 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>107</b>	<b>107</b>	In/Out





gTSetp_64	Temperature setpoint for uPC calendar day 6 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>108</b>	<b>108</b>	In/Out
gTSetp_65	Temperature setpoint for uPC calendar day 6 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>109</b>	<b>109</b>	In/Out
gTSetp_66	Temperature setpoint for uPC calendar day 6 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>110</b>	<b>110</b>	In/Out
gTSetp_71	Temperature setpoint for uPC calendar day 7 zone 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>111</b>	<b>111</b>	In/Out
gTSetp_72	Temperature setpoint for uPC calendar day 7 zone 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>112</b>	<b>112</b>	In/Out
gTSetp_73	Temperature setpoint for uPC calendar day 7 zone 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>113</b>	<b>113</b>	In/Out
gTSetp_74	Temperature setpoint for uPC calendar day 7 zone 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>114</b>	<b>114</b>	In/Out
gTSetp_75	Temperature setpoint for uPC calendar day 7 zone 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>115</b>	<b>115</b>	In/Out
gTSetp_76	Temperature setpoint for uPC calendar day 7 zone 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>116</b>	<b>116</b>	In/Out
gTSetp_Exc_1	Temperature setpoint for uPC calendar exception period 1	°C	00.0	99.9	0.1	20.0	T	Analog	<b>117</b>	<b>117</b>	In/Out
gTSetp_Exc_2	Temperature setpoint for uPC calendar exception period 2	°C	00.0	99.9	0.1	20.0	T	Analog	<b>118</b>	<b>118</b>	In/Out
gTSetp_Exc_3	Temperature setpoint for uPC calendar exception period 3	°C	00.0	99.9	0.1	20.0	T	Analog	<b>119</b>	<b>119</b>	In/Out
gTSetp_Exc_4	Temperature setpoint for uPC calendar exception period 4	°C	00.0	99.9	0.1	20.0	T	Analog	<b>120</b>	<b>120</b>	In/Out
gTSetp_Exc_5	Temperature setpoint for uPC calendar exception period 5	°C	00.0	99.9	0.1	20.0	T	Analog	<b>121</b>	<b>121</b>	In/Out
gTSetp_Exc_6	Temperature setpoint for uPC calendar exception period 6	°C	00.0	99.9	0.1	20.0	T	Analog	<b>122</b>	<b>122</b>	In/Out
fAlarm_AftRecoSens	Alarm flag for after recovery air temp sensor malfunction	---	0	1	1.0	0	X	Digital	<b>1</b>	<b>1</b>	Out
fAlarm_Chillers	Alarm flag for chiller	---	0	1	1.0	0	X	Digital	<b>2</b>	<b>2</b>	Out
fAlarm_ExhFanComm_1	Alarm flag for communication error FC Exhaust 1	---	0	1	1.0	0	X	Digital	<b>3</b>	<b>3</b>	Out
fAlarm_ExhFanComm_2	Alarm flag for communication error FC Exhaust 2	---	0	1	1.0	0	X	Digital	<b>4</b>	<b>4</b>	Out
fAlarm_ExhFanComm_3	Alarm flag for communication error FC Exhaust 3	---	0	1	1.0	0	X	Digital	<b>5</b>	<b>5</b>	Out
fAlarm_ExhFanComm_4	Alarm flag for communication error FC Exhaust 4	---	0	1	1.0	0	X	Digital	<b>6</b>	<b>6</b>	Out
fAlarm_ExhFanOvld_1	Alarm flag for overload FC Exhaust 1	---	0	1	1.0	0	X	Digital	<b>7</b>	<b>7</b>	Out



fAlarm_ExhFanOvld_2	Alarm flag for overload FC Exhaust 2	---	0	1	1.0	0	X	Digital	<b>8</b>	<b>8</b>	Out
fAlarm_ExhFanOvld_3	Alarm flag for overload FC Exhaust 3	---	0	1	1.0	0	X	Digital	<b>9</b>	<b>9</b>	Out
fAlarm_ExhFanOvld_4	Alarm flag for overload FC Exhaust 4	---	0	1	1.0	0	X	Digital	<b>10</b>	<b>10</b>	Out
fAlarm_ExhFilters	Alarm flag for ehxhaust filters	---	0	1	1.0	0	X	Digital	<b>11</b>	<b>11</b>	Out
fAlarm_ExhSens	Alarm flag for exhaust air temperature sensor malfunction	---	0	1	1.0	0	X	Digital	<b>12</b>	<b>12</b>	Out
fAlarm_ExternalSens	Alarm flag for external air temperature sensor malfunction	---	0	1	1.0	0	X	Digital	<b>13</b>	<b>13</b>	Out
fAlarm_Fire	Alarm flag for fire protection	---	0	1	1.0	0	X	Digital	<b>14</b>	<b>14</b>	Out
fAlarm_Heating	Alarm flag for heaters (common for water and electric heaters)	---	0	1	1.0	0	X	Digital	<b>15</b>	<b>15</b>	Out
fAlarm_Heating3xLocked	Alarm flag for heaters protection activated 3x and locked	---	0	1	1.0	0	X	Digital	<b>16</b>	<b>16</b>	Out
fAlarm_HEOVht	Alarm flag for electric heater overheating protection	---	0	1	1.0	0	X	Digital	<b>17</b>	<b>17</b>	Out
fAlarm_HMIBasicComm	Alarm flag for communication error HMI Basic (thTune device)	---	0	1	1.0	0	X	Digital	<b>18</b>	<b>18</b>	Out
fAlarm_HMIBasicInit	Alarm flag for initialization error HMI Basic (thTune device)	---	0	1	1.0	0	X	Digital	<b>19</b>	<b>19</b>	Out
fAlarm_HW_BackW	Alarm flag for heater's backwater temperature drop	---	0	1	1.0	0	X	Digital	<b>20</b>	<b>20</b>	Out
fAlarm_HW_Th	Alarm flag for heaters frost thermostat	---	0	1	1.0	0	X	Digital	<b>21</b>	<b>21</b>	Out
fAlarm_HWWaterSens	Alarm flag for heater's backwater sensor malfunction	---	0	1	1.0	0	X	Digital	<b>22</b>	<b>22</b>	Out
fAlarm_ManualMode	Alarm flag for manual override of controller's I/O	---	0	1	1.0	0	X	Digital	<b>23</b>	<b>23</b>	Out
fAlarm_PreHeating3xLocked	Alarm flag for heaters frost protection activated 3x and locked	---	0	1	1.0	0	X	Digital	<b>24</b>	<b>24</b>	Out
fAlarm_PreHW_BackW	Alarm flag for pre-heater's backwater temperature drop	---	0	1	1.0	0	X	Digital	<b>25</b>	<b>25</b>	Out
fAlarm_PreHW_Th	Alarm flag for pre-heaters frost thermostat	---	0	1	1.0	0	X	Digital	<b>26</b>	<b>26</b>	Out
fAlarm_PreHWSens	Alarm flag for air sensor malfunction after pre-heating coil	---	0	1	1.0	0	X	Digital	<b>27</b>	<b>27</b>	Out
fAlarm_PreHWWaterSens	Alarm flag for pre-heater's backwater sensor malfunction	---	0	1	1.0	0	X	Digital	<b>28</b>	<b>28</b>	Out
fAlarm_RoomSens	Alarm flag for room temperature sensor malfunction	---	0	1	1.0	0	X	Digital	<b>29</b>	<b>29</b>	Out



fAlarm_RRGComm	Alarm flag for communication RRG drive	---	0	1	1.0	0	X	Digital	<b>30</b>	<b>30</b>	Out
fAlarm_RRGovld	Alarm flag for overload RRG drive	---	0	1	1.0	0	X	Digital	<b>31</b>	<b>31</b>	Out
fAlarm_SupFanComm_1	Alarm flag for communication error FC Supply 1	---	0	1	1.0	0	X	Digital	<b>32</b>	<b>32</b>	Out
fAlarm_SupFanComm_2	Alarm flag for communication error FC Supply 2	---	0	1	1.0	0	X	Digital	<b>33</b>	<b>33</b>	Out
fAlarm_SupFanComm_3	Alarm flag for communication error FC Supply 3	---	0	1	1.0	0	X	Digital	<b>34</b>	<b>34</b>	Out
fAlarm_SupFanComm_4	Alarm flag for communication error FC Supply 4	---	0	1	1.0	0	X	Digital	<b>35</b>	<b>35</b>	Out
fAlarm_SupFanOvld_1	Alarm flag for overload FC Supply 1	---	0	1	1.0	0	X	Digital	<b>36</b>	<b>36</b>	Out
fAlarm_SupFanOvld_2	Alarm flag for overload FC Supply 2	---	0	1	1.0	0	X	Digital	<b>37</b>	<b>37</b>	Out
fAlarm_SupFanOvld_3	Alarm flag for overload FC Supply 3	---	0	1	1.0	0	X	Digital	<b>38</b>	<b>38</b>	Out
fAlarm_SupFanOvld_4	Alarm flag for overload FC Supply 4	---	0	1	1.0	0	X	Digital	<b>39</b>	<b>39</b>	Out
fAlarm_SupFilters	Alarm flag for supply filters	---	0	1	1.0	0	X	Digital	<b>40</b>	<b>40</b>	Out
fAlarm_SupSens	Alarm flag for supply air temperature sensor malfunction	---	0	1	1.0	0	X	Digital	<b>41</b>	<b>41</b>	Out
gAlarmAckPRG	Alarm Acknowledge default = 0 switch to 1 to cancel alarm memory will be reset to 0 automatically after 2 seconds Note! The same bit is activated by PRG button on HMI Advanced (pGD1 terminal)	---	0	1	1.0	0	X	Digital	<b>42</b>	<b>42</b>	In/Out
gBMS_SummerWinter	Switch the mode for universal heating / cooling coil 0=Summer 1=Winter	---	0	1	1.0	0	X	Digital	<b>43</b>	<b>43</b>	In/Out
gConf_AppCodeERR	Warning for bad configuration of the controller	---	0	1	1.0	0	X	Digital	<b>44</b>	<b>44</b>	Out
gConf_AppState	0=Config 1=Running	---	0	1	1.0	0	T	Digital	<b>45</b>	<b>45</b>	Out
gInputDI_1	State of digital input DI 1	---	0	1	1.0	0	X	Digital	<b>46</b>	<b>46</b>	Out



gInputDI_2	State of digital input DI 2	---	0	1	1.0	0	X	Digital	<b>47</b>	<b>47</b>	Out
gInputDI_3	State of digital input DI 3	---	0	1	1.0	0	X	Digital	<b>48</b>	<b>48</b>	Out
gInputDI_4	State of digital input DI 4	---	0	1	1.0	0	X	Digital	<b>49</b>	<b>49</b>	Out
gInputDI_5	State of digital input DI 5	---	0	1	1.0	0	X	Digital	<b>50</b>	<b>50</b>	Out
gInputDI_6	State of digital input DI 6	---	0	1	1.0	0	X	Digital	<b>51</b>	<b>51</b>	Out
gInputDI_7	State of digital input DI 7	---	0	1	1.0	0	X	Digital	<b>52</b>	<b>52</b>	Out
GLOBAL_ALARM	Global (general) alarm flag 0 = no pending alarms 1 = alarms need to be acknowledged	---	0	1	1.0	0	X	Digital	<b>53</b>	<b>53</b>	Out
gOpMode_SummerWinter	Indication of current operating mode	---	0	1	1.0	0	X	Digital	<b>54</b>	<b>54</b>	Out
gOutputREL_1	State of output relay 1	---	0	1	1.0	0	X	Digital	<b>55</b>	<b>55</b>	Out
gOutputREL_2	State of output relay 2	---	0	1	1.0	0	X	Digital	<b>56</b>	<b>56</b>	Out
gOutputREL_3	State of output relay 3	---	0	1	1.0	0	X	Digital	<b>57</b>	<b>57</b>	Out
gOutputREL_4	State of output relay 4	---	0	1	1.0	0	X	Digital	<b>58</b>	<b>58</b>	Out
gOutputREL_5	State of output relay 5	---	0	1	1.0	0	X	Digital	<b>59</b>	<b>59</b>	Out
gOutputREL_6	State of output relay 6	---	0	1	1.0	0	X	Digital	<b>60</b>	<b>60</b>	Out
gOutputREL_7	State of output relay 7	---	0	1	1.0	0	X	Digital	<b>61</b>	<b>61</b>	Out
gSched_DataErr	uPC calendar check flag 0 = OK 1 = calendar settings contain errors (e.g. bad order of time zones)	---	0	1	1.0	0	X	Digital	<b>62</b>	<b>62</b>	Out
gSched_ExcEnable_1	uPC calendar: enabled exceptions No. 1	---	0	1	1.0	0	T	Digital	<b>63</b>	<b>63</b>	In/Out
gSched_ExcEnable_2	uPC calendar: enabled exceptions No. 2	---	0	1	1.0	0	T	Digital	<b>64</b>	<b>64</b>	In/Out
gSched_ExcEnable_3	uPC calendar: enabled exceptions No. 3	---	0	1	1.0	0	T	Digital	<b>65</b>	<b>65</b>	In/Out



gSched_ExcEnable_4	uPC calendar: enabled exceptions No. 4	---	0	1	1.0	0	T	Digital	<b>66</b>	<b>66</b>	In/Out
gSched_ExcEnable_5	uPC calendar: enabled exceptions No. 5	---	0	1	1.0	0	T	Digital	<b>67</b>	<b>67</b>	In/Out
gSched_ExcEnable_6	uPC calendar: enabled exceptions No. 6	---	0	1	1.0	0	T	Digital	<b>68</b>	<b>68</b>	In/Out
gConf_AppCodeLtr	Application Code letter	---	0	4	1.0	0	T	Integer	<b>1</b>	<b>5001</b>	Out
gConf_AppCodeNum	Application Code number	---	0	1024	1.0	0	T	Integer	<b>2</b>	<b>5002</b>	Out
gFan_ExhFireSetp	Setpoint for exhaust fan operation at fire alarm 0 = off 1 = 20% speed 2 = 40% 3 = 60% 4 = 80% 5 = 100% 6 - do not use!	---	0	6	1.0	0	T	Integer	<b>3</b>	<b>5003</b>	In/Out
gFan_ExhStartCommand	Exhaust fan start command 1 = Stop 2 = Run	---	-32768	32767	1.0	0	X	Integer	<b>4</b>	<b>5004</b>	Out
gFan_ExhStatus_1	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>5</b>	<b>5005</b>	Out
gFan_ExhStatus_2	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>6</b>	<b>5006</b>	Out



gFan_ExhStatus_3	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>7</b>	<b>5007</b>	Out
gFan_ExhStatus_4	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>8</b>	<b>5008</b>	Out
gFan_SupFireSetp	Setpoint for supply fan operation at fire alarm 0 = off 1 = 20% speed 2 = 40% 3 = 60% 4 = 80% 5 = 100% 6 - do not use!	---	0	6	1.0	0	T	Integer	<b>9</b>	<b>5009</b>	In/Out
gFan_SupStartCommand	Supply fan start command 1 = Stop 2 = Run	---	-32768	32767	1.0	0	X	Integer	<b>10</b>	<b>5010</b>	Out
gFan_SupStatus_1	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>11</b>	<b>5011</b>	Out
gFan_SupStatus_2	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>12</b>	<b>5012</b>	Out



gFan_SupStatus_3	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>13</b>	<b>5013</b>	Out
gFan_SupStatus_4	Status of the frequency converter 0=OK, 1=Comm - communication errors 2=Alarm - device reported an alarm	---	0	9999	1.0	0	X	Integer	<b>14</b>	<b>5014</b>	Out
gOpMode_BMS	Setpoint for operating mode from BMS 0 = Auto 1 = Off 2 = Standby 3 = Low 4 = Econo 5 = Comfort Note! Setting will be lost after power-down. It's stored in X-memory (RAM)	---	0	5	1.0	1	X	Integer	<b>15</b>	<b>5015</b>	In/Out
gOpMode_DI	Operating mode resulting from digital inputs. 0..5 = the same meaning like above.	---	0	5	1.0	1	X	Integer	<b>16</b>	<b>5016</b>	Out
gOpMode_Main	General operating mode resulting from all sources. Controller works according to that value. 0..5 = the same meaning like above.	---	0	5	1.0	1	X	Integer	<b>17</b>	<b>5017</b>	Out
gOpMode_PGD	Operating mode resulting from HMI Advanced (pGD1 terminal) 0..5 = the same meaning like above.	---	0	5	1.0	1	T	Integer	<b>18</b>	<b>5018</b>	Out
gOpMode_Scheduler	Operating mode resulting from uPC calendar 0..5 = the same meaning like above.	---	0	5	1.0	1	X	Integer	<b>19</b>	<b>5019</b>	Out
gOpMode_thTune	Operating mode resulting from HMI Basic (thTune terminal) 0..5 = the same meaning like above.	---	0	5	1.0	0	X	Integer	<b>20</b>	<b>5020</b>	Out



gOpMode_thTuneScheduler	Operating mode resulting from HMI Basic calendar 0..5 = the same meaning like above.	---	0	5	1.0	0	X	Integer	<b>21</b>	<b>5021</b>	Out
gSet_IdleDelayExh	Time for startup of the AHU - Exhaust fans run at minimal speed	s	0	180	1.0	30	T	Integer	<b>22</b>	<b>5022</b>	In/Out
gSet_IdleDelaySup	Time for startup of the AHU - Supply fans run at minimal speed	s	0	180	1.0	20	T	Integer	<b>23</b>	<b>5023</b>	In/Out
gSet_MixCmbrMode	Mode of mixing chamber 0 = Max. energy changeover - controlled by PI regulator 1 = Manual mode 2 = According to analog input AI7	---	0	2	1.0	0	T	Integer	<b>24</b>	<b>5024</b>	In/Out
gSet_OffDelayExh	Time for rundown of the AHU - Exhaust fans run at minimal speed	s	0	180	1.0	10	T	Integer	<b>25</b>	<b>5025</b>	In/Out
gSet_OffDelaySup	Time for rundown of the AHU - Supply fans run at minimal speed	s	0	180	1.0	10	T	Integer	<b>26</b>	<b>5026</b>	In/Out
gSet_OnDelayExh	Time delay before startup of the AHU - Exhaust fans waiting	s	0	180	1.0	10	T	Integer	<b>27</b>	<b>5027</b>	In/Out
gSet_OnDelaySup	Time delay before startup of the AHU - Supply fans waiting	s	0	180	1.0	20	T	Integer	<b>28</b>	<b>5028</b>	In/Out





gActOpMode	<p>Actual operating mode of the AHU - depends on gOpMode_Main and current conditions, alarms, startup etc.</p> <p>0 = Off            1 = Initial Heating            2 = Startup            3 = Standby Heating            4 = Standby Cooling            5 = Fast Heating            6 = Fast Cooling            7 = Heating            8 = Ventilation            9 = Cooling            10 = Night Cooling            11 = Overrun (rundown of the AHU)            12 = Fire mode            13 = Night Test            14 = Emergency Stop            15 = Alarm Stop            16 = Critical Alarm Stop            17 = Configuration (AHU cannot be started)</p>	---	0	17	1.0	1	X	Integer	<b>29</b>	<b>5029</b>	Out
gRRG_Status	<p>Status of the frequency converter</p> <p>0=OK,            1=Comm - communication errors            2=Alarm - device reported an alarm</p>	---	0	9999	1.0	0	X	Integer	<b>30</b>	<b>5030</b>	Out



gOpMode_11	Setpoint for operating mode from uPC calendar, day 1, time zone 1 0 = Auto 1 = Off 2 = Standby 3 = Low 4 = Econo 5 = Comfort	---	0	5	1.0	0	T	Integer	<b>31</b>	<b>5031</b>	In/Out
gOpMode_12	Setpoint for operating mode from uPC calendar, day 1, time zone 2	---	0	5	1.0	0	T	Integer	<b>32</b>	<b>5032</b>	In/Out
gOpMode_13	Setpoint for operating mode from uPC calendar, day 1, time zone 3	---	0	5	1.0	0	T	Integer	<b>33</b>	<b>5033</b>	In/Out
gOpMode_14	Setpoint for operating mode from uPC calendar, day 1, time zone 4	---	0	5	1.0	0	T	Integer	<b>34</b>	<b>5034</b>	In/Out
gOpMode_15	Setpoint for operating mode from uPC calendar, day 1, time zone 5	---	0	5	1.0	0	T	Integer	<b>35</b>	<b>5035</b>	In/Out
gOpMode_16	Setpoint for operating mode from uPC calendar, day 1, time zone 6	---	0	5	1.0	0	T	Integer	<b>36</b>	<b>5036</b>	In/Out
gOpMode_21	Setpoint for operating mode from uPC calendar, day 2, time zone 1	---	0	5	1.0	0	T	Integer	<b>37</b>	<b>5037</b>	In/Out
gOpMode_22	Setpoint for operating mode from uPC calendar, day 2, time zone 2	---	0	5	1.0	0	T	Integer	<b>38</b>	<b>5038</b>	In/Out
gOpMode_23	Setpoint for operating mode from uPC calendar, day 2, time zone 3	---	0	5	1.0	0	T	Integer	<b>39</b>	<b>5039</b>	In/Out
gOpMode_24	Setpoint for operating mode from uPC calendar, day 2, time zone 4	---	0	5	1.0	0	T	Integer	<b>40</b>	<b>5040</b>	In/Out
gOpMode_25	Setpoint for operating mode from uPC calendar, day 2, time zone 5	---	0	5	1.0	0	T	Integer	<b>41</b>	<b>5041</b>	In/Out
gOpMode_26	Setpoint for operating mode from uPC calendar, day 2, time zone 6	---	0	5	1.0	0	T	Integer	<b>42</b>	<b>5042</b>	In/Out
gOpMode_31	Setpoint for operating mode from uPC calendar, day 3, time zone 1	---	0	5	1.0	0	T	Integer	<b>43</b>	<b>5043</b>	In/Out
gOpMode_32	Setpoint for operating mode from uPC calendar, day 3, time zone 2	---	0	5	1.0	0	T	Integer	<b>44</b>	<b>5044</b>	In/Out
gOpMode_33	Setpoint for operating mode from uPC calendar, day 3, time zone 3	---	0	5	1.0	0	T	Integer	<b>45</b>	<b>5045</b>	In/Out
gOpMode_34	Setpoint for operating mode from uPC calendar, day 3, time zone 4	---	0	5	1.0	0	T	Integer	<b>46</b>	<b>5046</b>	In/Out
gOpMode_35	Setpoint for operating mode from uPC calendar, day 3, time zone 5	---	0	5	1.0	0	T	Integer	<b>47</b>	<b>5047</b>	In/Out



gOpMode_36	Setpoint for operating mode from uPC calendar, day 3, time zone 6	---	0	5	1.0	0	T	Integer	<b>48</b>	<b>5048</b>	In/Out
gOpMode_41	Setpoint for operating mode from uPC calendar, day 4, time zone 1	---	0	5	1.0	0	T	Integer	<b>49</b>	<b>5049</b>	In/Out
gOpMode_42	Setpoint for operating mode from uPC calendar, day 4, time zone 2	---	0	5	1.0	0	T	Integer	<b>50</b>	<b>5050</b>	In/Out
gOpMode_43	Setpoint for operating mode from uPC calendar, day 4, time zone 3	---	0	5	1.0	0	T	Integer	<b>51</b>	<b>5051</b>	In/Out
gOpMode_44	Setpoint for operating mode from uPC calendar, day 4, time zone 4	---	0	5	1.0	0	T	Integer	<b>52</b>	<b>5052</b>	In/Out
gOpMode_45	Setpoint for operating mode from uPC calendar, day 4, time zone 5	---	0	5	1.0	0	T	Integer	<b>53</b>	<b>5053</b>	In/Out
gOpMode_46	Setpoint for operating mode from uPC calendar, day 4, time zone 6	---	0	5	1.0	0	T	Integer	<b>54</b>	<b>5054</b>	In/Out
gOpMode_51	Setpoint for operating mode from uPC calendar, day 5, time zone 1	---	0	5	1.0	0	T	Integer	<b>55</b>	<b>5055</b>	In/Out
gOpMode_52	Setpoint for operating mode from uPC calendar, day 5, time zone 2	---	0	5	1.0	0	T	Integer	<b>56</b>	<b>5056</b>	In/Out
gOpMode_53	Setpoint for operating mode from uPC calendar, day 5, time zone 3	---	0	5	1.0	0	T	Integer	<b>57</b>	<b>5057</b>	In/Out
gOpMode_54	Setpoint for operating mode from uPC calendar, day 5, time zone 4	---	0	5	1.0	0	T	Integer	<b>58</b>	<b>5058</b>	In/Out
gOpMode_55	Setpoint for operating mode from uPC calendar, day 5, time zone 5	---	0	5	1.0	0	T	Integer	<b>59</b>	<b>5059</b>	In/Out
gOpMode_56	Setpoint for operating mode from uPC calendar, day 5, time zone 6	---	0	5	1.0	0	T	Integer	<b>60</b>	<b>5060</b>	In/Out
gOpMode_61	Setpoint for operating mode from uPC calendar, day 6, time zone 1	---	0	5	1.0	0	T	Integer	<b>61</b>	<b>5061</b>	In/Out
gOpMode_62	Setpoint for operating mode from uPC calendar, day 6, time zone 2	---	0	5	1.0	0	T	Integer	<b>62</b>	<b>5062</b>	In/Out
gOpMode_63	Setpoint for operating mode from uPC calendar, day 6, time zone 3	---	0	5	1.0	0	T	Integer	<b>63</b>	<b>5063</b>	In/Out
gOpMode_64	Setpoint for operating mode from uPC calendar, day 6, time zone 4	---	0	5	1.0	0	T	Integer	<b>64</b>	<b>5064</b>	In/Out
gOpMode_65	Setpoint for operating mode from uPC calendar, day 6, time zone 5	---	0	5	1.0	0	T	Integer	<b>65</b>	<b>5065</b>	In/Out
gOpMode_66	Setpoint for operating mode from uPC calendar, day 6, time zone 6	---	0	5	1.0	0	T	Integer	<b>66</b>	<b>5066</b>	In/Out
gOpMode_71	Setpoint for operating mode from uPC calendar, day 7, time zone 1	---	0	5	1.0	0	T	Integer	<b>67</b>	<b>5067</b>	In/Out
gOpMode_72	Setpoint for operating mode from uPC calendar, day 7, time zone 2	---	0	5	1.0	0	T	Integer	<b>68</b>	<b>5068</b>	In/Out
gOpMode_73	Setpoint for operating mode from uPC calendar, day 7, time zone 3	---	0	5	1.0	0	T	Integer	<b>69</b>	<b>5069</b>	In/Out



gOpMode_74	Setpoint for operating mode from uPC calendar, day 7, time zone 4	---	0	5	1.0	0	T	Integer	<b>70</b>	<b>5070</b>	In/Out
gOpMode_75	Setpoint for operating mode from uPC calendar, day 7, time zone 5	---	0	5	1.0	0	T	Integer	<b>71</b>	<b>5071</b>	In/Out
gOpMode_76	Setpoint for operating mode from uPC calendar, day 7, time zone 6	---	0	5	1.0	0	T	Integer	<b>72</b>	<b>5072</b>	In/Out
gOpMode_Exc_1	Setpoint for operating mode from uPC calendar, exception period 1	---	0	5	1.0	0	T	Integer	<b>73</b>	<b>5073</b>	In/Out
gOpMode_Exc_2	Setpoint for operating mode from uPC calendar, exception period 2	---	0	5	1.0	0	T	Integer	<b>74</b>	<b>5074</b>	In/Out
gOpMode_Exc_3	Setpoint for operating mode from uPC calendar, exception period 3	---	0	5	1.0	0	T	Integer	<b>75</b>	<b>5075</b>	In/Out
gOpMode_Exc_4	Setpoint for operating mode from uPC calendar, exception period 4	---	0	5	1.0	0	T	Integer	<b>76</b>	<b>5076</b>	In/Out
gOpMode_Exc_5	Setpoint for operating mode from uPC calendar, exception period 5	---	0	5	1.0	0	T	Integer	<b>77</b>	<b>5077</b>	In/Out
gOpMode_Exc_6	Setpoint for operating mode from uPC calendar, exception period 6	---	0	5	1.0	0	T	Integer	<b>78</b>	<b>5078</b>	In/Out
gSched_ExcEndDay_1	uPC calendar - end day for exception period 1	---	1	31	1.0	1	T	Integer	<b>79</b>	<b>5079</b>	In/Out
gSched_ExcEndDay_2	uPC calendar - end day for exception period 2	---	1	31	1.0	1	T	Integer	<b>80</b>	<b>5080</b>	In/Out
gSched_ExcEndDay_3	uPC calendar - end day for exception period 3	---	1	31	1.0	1	T	Integer	<b>81</b>	<b>5081</b>	In/Out
gSched_ExcEndDay_4	uPC calendar - end day for exception period 4	---	1	31	1.0	1	T	Integer	<b>82</b>	<b>5082</b>	In/Out
gSched_ExcEndDay_5	uPC calendar - end day for exception period 5	---	1	31	1.0	1	T	Integer	<b>83</b>	<b>5083</b>	In/Out
gSched_ExcEndDay_6	uPC calendar - end day for exception period 6	---	1	31	1.0	1	T	Integer	<b>84</b>	<b>5084</b>	In/Out
gSched_ExcEndHour_1	uPC calendar - end hour for exception period 1	---	0	23	1.0	0	T	Integer	<b>85</b>	<b>5085</b>	In/Out
gSched_ExcEndHour_2	uPC calendar - end hour for exception period 2	---	0	23	1.0	0	T	Integer	<b>86</b>	<b>5086</b>	In/Out
gSched_ExcEndHour_3	uPC calendar - end hour for exception period 3	---	0	23	1.0	0	T	Integer	<b>87</b>	<b>5087</b>	In/Out
gSched_ExcEndHour_4	uPC calendar - end hour for exception period 4	---	0	23	1.0	0	T	Integer	<b>88</b>	<b>5088</b>	In/Out
gSched_ExcEndHour_5	uPC calendar - end hour for exception period 5	---	0	23	1.0	0	T	Integer	<b>89</b>	<b>5089</b>	In/Out
gSched_ExcEndHour_6	uPC calendar - end hour for exception period 6	---	0	23	1.0	0	T	Integer	<b>90</b>	<b>5090</b>	In/Out
gSched_ExcEndMinute_1	uPC calendar - end minute for exception period 1	---	0	59	1.0	0	T	Integer	<b>91</b>	<b>5091</b>	In/Out



gSched_ExcEndMinute_2	uPC calendar - end minute for exception period 2	---	0	59	1.0	0	T	Integer	<b>92</b>	<b>5092</b>	In/Out
gSched_ExcEndMinute_3	uPC calendar - end minute for exception period 3	---	0	59	1.0	0	T	Integer	<b>93</b>	<b>5093</b>	In/Out
gSched_ExcEndMinute_4	uPC calendar - end minute for exception period 4	---	0	59	1.0	0	T	Integer	<b>94</b>	<b>5094</b>	In/Out
gSched_ExcEndMinute_5	uPC calendar - end minute for exception period 5	---	0	59	1.0	0	T	Integer	<b>95</b>	<b>5095</b>	In/Out
gSched_ExcEndMinute_6	uPC calendar - end minute for exception period 6	---	0	59	1.0	0	T	Integer	<b>96</b>	<b>5096</b>	In/Out
gSched_ExcEndMonth_1	uPC calendar - end month for exception period 1	---	1	12	1.0	1	T	Integer	<b>97</b>	<b>5097</b>	In/Out
gSched_ExcEndMonth_2	uPC calendar - end month for exception period 2	---	1	12	1.0	1	T	Integer	<b>98</b>	<b>5098</b>	In/Out
gSched_ExcEndMonth_3	uPC calendar - end month for exception period 3	---	1	12	1.0	1	T	Integer	<b>99</b>	<b>5099</b>	In/Out
gSched_ExcEndMonth_4	uPC calendar - end month for exception period 4	---	1	12	1.0	1	T	Integer	<b>100</b>	<b>5100</b>	In/Out
gSched_ExcEndMonth_5	uPC calendar - end month for exception period 5	---	1	12	1.0	1	T	Integer	<b>101</b>	<b>5101</b>	In/Out
gSched_ExcEndMonth_6	uPC calendar - end month for exception period 6	---	1	12	1.0	1	T	Integer	<b>102</b>	<b>5102</b>	In/Out
gSched_ExcStartDay_1	uPC calendar - start day for exception period 1	---	1	31	1.0	1	T	Integer	<b>103</b>	<b>5103</b>	In/Out
gSched_ExcStartDay_2	uPC calendar - start day for exception period 2	---	1	31	1.0	1	T	Integer	<b>104</b>	<b>5104</b>	In/Out
gSched_ExcStartDay_3	uPC calendar - start day for exception period 3	---	1	31	1.0	1	T	Integer	<b>105</b>	<b>5105</b>	In/Out
gSched_ExcStartDay_4	uPC calendar - start day for exception period 4	---	1	31	1.0	1	T	Integer	<b>106</b>	<b>5106</b>	In/Out
gSched_ExcStartDay_5	uPC calendar - start day for exception period 5	---	1	31	1.0	1	T	Integer	<b>107</b>	<b>5107</b>	In/Out
gSched_ExcStartDay_6	uPC calendar - start day for exception period 6	---	1	31	1.0	1	T	Integer	<b>108</b>	<b>5108</b>	In/Out
gSched_ExcStartHour_1	uPC calendar - start hour for exception period 1	---	0	23	1.0	0	T	Integer	<b>109</b>	<b>5109</b>	In/Out
gSched_ExcStartHour_2	uPC calendar - start hour for exception period 2	---	0	23	1.0	0	T	Integer	<b>110</b>	<b>5110</b>	In/Out
gSched_ExcStartHour_3	uPC calendar - start hour for exception period 3	---	0	23	1.0	0	T	Integer	<b>111</b>	<b>5111</b>	In/Out
gSched_ExcStartHour_4	uPC calendar - start hour for exception period 4	---	0	23	1.0	0	T	Integer	<b>112</b>	<b>5112</b>	In/Out
gSched_ExcStartHour_5	uPC calendar - start hour for exception period 5	---	0	23	1.0	0	T	Integer	<b>113</b>	<b>5113</b>	In/Out



gSched_ExcStartHour_6	uPC calendar - start hour for exception period 6	---	0	23	1.0	0	T	Integer	<b>114</b>	<b>5114</b>	In/Out
gSched_ExcStartMinute_1	uPC calendar - start minute for exception period 1	---	0	59	1.0	0	T	Integer	<b>115</b>	<b>5115</b>	In/Out
gSched_ExcStartMinute_2	uPC calendar - start minute for exception period 2	---	0	59	1.0	0	T	Integer	<b>116</b>	<b>5116</b>	In/Out
gSched_ExcStartMinute_3	uPC calendar - start minute for exception period 3	---	0	59	1.0	0	T	Integer	<b>117</b>	<b>5117</b>	In/Out
gSched_ExcStartMinute_4	uPC calendar - start minute for exception period 4	---	0	59	1.0	0	T	Integer	<b>118</b>	<b>5118</b>	In/Out
gSched_ExcStartMinute_5	uPC calendar - start minute for exception period 5	---	0	59	1.0	0	T	Integer	<b>119</b>	<b>5119</b>	In/Out
gSched_ExcStartMinute_6	uPC calendar - start minute for exception period 6	---	0	59	1.0	0	T	Integer	<b>120</b>	<b>5120</b>	In/Out
gSched_ExcStartMonth_1	uPC calendar - start month for exception period 1	---	1	12	1.0	1	T	Integer	<b>121</b>	<b>5121</b>	In/Out
gSched_ExcStartMonth_2	uPC calendar - start month for exception period 2	---	1	12	1.0	1	T	Integer	<b>122</b>	<b>5122</b>	In/Out
gSched_ExcStartMonth_3	uPC calendar - start month for exception period 3	---	1	12	1.0	1	T	Integer	<b>123</b>	<b>5123</b>	In/Out
gSched_ExcStartMonth_4	uPC calendar - start month for exception period 4	---	1	12	1.0	1	T	Integer	<b>124</b>	<b>5124</b>	In/Out
gSched_ExcStartMonth_5	uPC calendar - start month for exception period 5	---	1	12	1.0	1	T	Integer	<b>125</b>	<b>5125</b>	In/Out
gSched_ExcStartMonth_6	uPC calendar - start month for exception period 6	---	1	12	1.0	1	T	Integer	<b>126</b>	<b>5126</b>	In/Out
gSched_TmStartH_12	uPC calendar - start hour for day 1, time zone 2	h	0	23	1.0	23	T	Integer	<b>127</b>	<b>5127</b>	In/Out
gSched_TmStartH_13	uPC calendar - start hour for day 1, time zone 3	h	0	23	1.0	23	T	Integer	<b>128</b>	<b>5128</b>	In/Out
gSched_TmStartH_14	uPC calendar - start hour for day 1, time zone 4	h	0	23	1.0	23	T	Integer	<b>129</b>	<b>5129</b>	In/Out
gSched_TmStartH_15	uPC calendar - start hour for day 1, time zone 5	h	0	23	1.0	23	T	Integer	<b>130</b>	<b>5130</b>	In/Out
gSched_TmStartH_16	uPC calendar - start hour for day 1, time zone 6	h	0	23	1.0	23	T	Integer	<b>131</b>	<b>5131</b>	In/Out
gSched_TmStartH_22	uPC calendar - start hour for day 2, time zone 2	h	0	23	1.0	23	T	Integer	<b>132</b>	<b>5132</b>	In/Out
gSched_TmStartH_23	uPC calendar - start hour for day 2, time zone 3	h	0	23	1.0	23	T	Integer	<b>133</b>	<b>5133</b>	In/Out
gSched_TmStartH_24	uPC calendar - start hour for day 2, time zone 4	h	0	23	1.0	23	T	Integer	<b>134</b>	<b>5134</b>	In/Out
gSched_TmStartH_25	uPC calendar - start hour for day 2, time zone 5	h	0	23	1.0	23	T	Integer	<b>135</b>	<b>5135</b>	In/Out



gSched_TmStartH_26	uPC calendar - start hour for day 2, time zone 6	h	0	23	1.0	23	T	Integer	<b>136</b>	<b>5136</b>	In/Out
gSched_TmStartH_32	uPC calendar - start hour for day 3, time zone 2	h	0	23	1.0	23	T	Integer	<b>137</b>	<b>5137</b>	In/Out
gSched_TmStartH_33	uPC calendar - start hour for day 3, time zone 3	h	0	23	1.0	23	T	Integer	<b>138</b>	<b>5138</b>	In/Out
gSched_TmStartH_34	uPC calendar - start hour for day 3, time zone 4	h	0	23	1.0	23	T	Integer	<b>139</b>	<b>5139</b>	In/Out
gSched_TmStartH_35	uPC calendar - start hour for day 3, time zone 5	h	0	23	1.0	23	T	Integer	<b>140</b>	<b>5140</b>	In/Out
gSched_TmStartH_36	uPC calendar - start hour for day 3, time zone 6	h	0	23	1.0	23	T	Integer	<b>141</b>	<b>5141</b>	In/Out
gSched_TmStartH_42	uPC calendar - start hour for day 4, time zone 2	h	0	23	1.0	23	T	Integer	<b>142</b>	<b>5142</b>	In/Out
gSched_TmStartH_43	uPC calendar - start hour for day 4, time zone 3	h	0	23	1.0	23	T	Integer	<b>143</b>	<b>5143</b>	In/Out
gSched_TmStartH_44	uPC calendar - start hour for day 4, time zone 4	h	0	23	1.0	23	T	Integer	<b>144</b>	<b>5144</b>	In/Out
gSched_TmStartH_45	uPC calendar - start hour for day 4, time zone 5	h	0	23	1.0	23	T	Integer	<b>145</b>	<b>5145</b>	In/Out
gSched_TmStartH_46	uPC calendar - start hour for day 4, time zone 6	h	0	23	1.0	23	T	Integer	<b>146</b>	<b>5146</b>	In/Out
gSched_TmStartH_52	uPC calendar - start hour for day 5, time zone 2	h	0	23	1.0	23	T	Integer	<b>147</b>	<b>5147</b>	In/Out
gSched_TmStartH_53	uPC calendar - start hour for day 5, time zone 3	h	0	23	1.0	23	T	Integer	<b>148</b>	<b>5148</b>	In/Out
gSched_TmStartH_54	uPC calendar - start hour for day 5, time zone 4	h	0	23	1.0	23	T	Integer	<b>149</b>	<b>5149</b>	In/Out
gSched_TmStartH_55	uPC calendar - start hour for day 5, time zone 5	h	0	23	1.0	23	T	Integer	<b>150</b>	<b>5150</b>	In/Out
gSched_TmStartH_56	uPC calendar - start hour for day 5, time zone 6	h	0	23	1.0	23	T	Integer	<b>151</b>	<b>5151</b>	In/Out
gSched_TmStartH_62	uPC calendar - start hour for day 6, time zone 2	h	0	23	1.0	23	T	Integer	<b>152</b>	<b>5152</b>	In/Out
gSched_TmStartH_63	uPC calendar - start hour for day 6, time zone 3	h	0	23	1.0	23	T	Integer	<b>153</b>	<b>5153</b>	In/Out
gSched_TmStartH_64	uPC calendar - start hour for day 6, time zone 4	h	0	23	1.0	23	T	Integer	<b>154</b>	<b>5154</b>	In/Out
gSched_TmStartH_65	uPC calendar - start hour for day 6, time zone 5	h	0	23	1.0	23	T	Integer	<b>155</b>	<b>5155</b>	In/Out
gSched_TmStartH_66	uPC calendar - start hour for day 6, time zone 6	h	0	23	1.0	23	T	Integer	<b>156</b>	<b>5156</b>	In/Out
gSched_TmStartH_72	uPC calendar - start hour for day 7, time zone 2	h	0	23	1.0	23	T	Integer	<b>157</b>	<b>5157</b>	In/Out



gSched_TmStartH_73	uPC calendar - start hour for day 7, time zone 3	h	0	23	1.0	23	T	Integer	<b>158</b>	<b>5158</b>	In/Out
gSched_TmStartH_74	uPC calendar - start hour for day 7, time zone 4	h	0	23	1.0	23	T	Integer	<b>159</b>	<b>5159</b>	In/Out
gSched_TmStartH_75	uPC calendar - start hour for day 7, time zone 5	h	0	23	1.0	23	T	Integer	<b>160</b>	<b>5160</b>	In/Out
gSched_TmStartH_76	uPC calendar - start hour for day 7, time zone 6	h	0	23	1.0	23	T	Integer	<b>161</b>	<b>5161</b>	In/Out
gSched_TmStartM_12	uPC calendar - start minute for day 1, time zone 2	min	0	59	1.0	59	T	Integer	<b>162</b>	<b>5162</b>	In/Out
gSched_TmStartM_13	uPC calendar - start minute for day 1, time zone 3	min	0	59	1.0	59	T	Integer	<b>163</b>	<b>5163</b>	In/Out
gSched_TmStartM_14	uPC calendar - start minute for day 1, time zone 4	min	0	59	1.0	59	T	Integer	<b>164</b>	<b>5164</b>	In/Out
gSched_TmStartM_15	uPC calendar - start minute for day 1, time zone 5	min	0	59	1.0	59	T	Integer	<b>165</b>	<b>5165</b>	In/Out
gSched_TmStartM_16	uPC calendar - start minute for day 1, time zone 6	min	0	59	1.0	59	T	Integer	<b>166</b>	<b>5166</b>	In/Out
gSched_TmStartM_22	uPC calendar - start minute for day 2, time zone 2	min	0	59	1.0	59	T	Integer	<b>167</b>	<b>5167</b>	In/Out
gSched_TmStartM_23	uPC calendar - start minute for day 2, time zone 3	min	0	59	1.0	59	T	Integer	<b>168</b>	<b>5168</b>	In/Out
gSched_TmStartM_24	uPC calendar - start minute for day 2, time zone 4	min	0	59	1.0	59	T	Integer	<b>169</b>	<b>5169</b>	In/Out
gSched_TmStartM_25	uPC calendar - start minute for day 2, time zone 5	min	0	59	1.0	59	T	Integer	<b>170</b>	<b>5170</b>	In/Out
gSched_TmStartM_26	uPC calendar - start minute for day 2, time zone 6	min	0	59	1.0	59	T	Integer	<b>171</b>	<b>5171</b>	In/Out
gSched_TmStartM_32	uPC calendar - start minute for day 3, time zone 2	min	0	59	1.0	59	T	Integer	<b>172</b>	<b>5172</b>	In/Out
gSched_TmStartM_33	uPC calendar - start minute for day 3, time zone 3	min	0	59	1.0	59	T	Integer	<b>173</b>	<b>5173</b>	In/Out
gSched_TmStartM_34	uPC calendar - start minute for day 3, time zone 4	min	0	59	1.0	59	T	Integer	<b>174</b>	<b>5174</b>	In/Out
gSched_TmStartM_35	uPC calendar - start minute for day 3, time zone 5	min	0	59	1.0	59	T	Integer	<b>175</b>	<b>5175</b>	In/Out
gSched_TmStartM_36	uPC calendar - start minute for day 3, time zone 6	min	0	59	1.0	59	T	Integer	<b>176</b>	<b>5176</b>	In/Out
gSched_TmStartM_42	uPC calendar - start minute for day 4, time zone 2	min	0	59	1.0	59	T	Integer	<b>177</b>	<b>5177</b>	In/Out
gSched_TmStartM_43	uPC calendar - start minute for day 4, time zone 3	min	0	59	1.0	59	T	Integer	<b>178</b>	<b>5178</b>	In/Out
gSched_TmStartM_44	uPC calendar - start minute for day 4, time zone 4	min	0	59	1.0	59	T	Integer	<b>179</b>	<b>5179</b>	In/Out





gSched_TmStartM_45	uPC calendar - start minute for day 4, time zone 5	min	0	59	1.0	59	T	Integer	<b>180</b>	<b>5180</b>	In/Out
gSched_TmStartM_46	uPC calendar - start minute for day 4, time zone 6	min	0	59	1.0	59	T	Integer	<b>181</b>	<b>5181</b>	In/Out
gSched_TmStartM_52	uPC calendar - start minute for day 5, time zone 2	min	0	59	1.0	59	T	Integer	<b>182</b>	<b>5182</b>	In/Out
gSched_TmStartM_53	uPC calendar - start minute for day 5, time zone 3	min	0	59	1.0	59	T	Integer	<b>183</b>	<b>5183</b>	In/Out
gSched_TmStartM_54	uPC calendar - start minute for day 5, time zone 4	min	0	59	1.0	59	T	Integer	<b>184</b>	<b>5184</b>	In/Out
gSched_TmStartM_55	uPC calendar - start minute for day 5, time zone 5	min	0	59	1.0	59	T	Integer	<b>185</b>	<b>5185</b>	In/Out
gSched_TmStartM_56	uPC calendar - start minute for day 5, time zone 6	min	0	59	1.0	59	T	Integer	<b>186</b>	<b>5186</b>	In/Out
gSched_TmStartM_62	uPC calendar - start minute for day 6, time zone 2	min	0	59	1.0	59	T	Integer	<b>187</b>	<b>5187</b>	In/Out
gSched_TmStartM_63	uPC calendar - start minute for day 6, time zone 3	min	0	59	1.0	59	T	Integer	<b>188</b>	<b>5188</b>	In/Out
gSched_TmStartM_64	uPC calendar - start minute for day 6, time zone 4	min	0	59	1.0	59	T	Integer	<b>189</b>	<b>5189</b>	In/Out
gSched_TmStartM_65	uPC calendar - start minute for day 6, time zone 5	min	0	59	1.0	59	T	Integer	<b>190</b>	<b>5190</b>	In/Out
gSched_TmStartM_66	uPC calendar - start minute for day 6, time zone 6	min	0	59	1.0	59	T	Integer	<b>191</b>	<b>5191</b>	In/Out
gSched_TmStartM_72	uPC calendar - start minute for day 7, time zone 2	min	0	59	1.0	59	T	Integer	<b>192</b>	<b>5192</b>	In/Out
gSched_TmStartM_73	uPC calendar - start minute for day 7, time zone 3	min	0	59	1.0	59	T	Integer	<b>193</b>	<b>5193</b>	In/Out
gSched_TmStartM_74	uPC calendar - start minute for day 7, time zone 4	min	0	59	1.0	59	T	Integer	<b>194</b>	<b>5194</b>	In/Out
gSched_TmStartM_75	uPC calendar - start minute for day 7, time zone 5	min	0	59	1.0	59	T	Integer	<b>195</b>	<b>5195</b>	In/Out
gSched_TmStartM_76	uPC calendar - start minute for day 7, time zone 6	min	0	59	1.0	59	T	Integer	<b>196</b>	<b>5196</b>	In/Out
CURRENT_DAY	Current day	D	1	31	1.0	1	X	Integer	<b>197</b>	<b>5197</b>	In/Out
CURRENT_HOUR	Current hour	h	0	23	1.0	0	X	Integer	<b>198</b>	<b>5198</b>	In/Out
CURRENT_MINUTE	Current minute	min	0	59	1.0	0	X	Integer	<b>199</b>	<b>5199</b>	In/Out
CURRENT_MONTH	Current month	M	1	12	1.0	1	X	Integer	<b>200</b>	<b>5200</b>	In/Out
CURRENT_YEAR	Current year	Y	0	99	1.0	0	X	Integer	<b>201</b>	<b>5201</b>	In/Out

