# Modbus Register Map - Smart-UPS

**Models with prefix SMT, SMX, SURTD, and SRT**

**Part number: 990-9840A**

Notes:

1. All data is transmitted MSB first (i.e. big-endian).
2. Modbus Serial RTU is supported on NMC model AP9635, and Modbus TCP is supported on NMC models AP9635, AP9630, AP9631 and AP9537SUM.
3. Status bits are atomic within a single Modbus register or data point. User should not look for consistency across multiple registers, only within a single register.
4. Single register reads of undefined registers will return an error. Block reads that begin with a valid register will not return an error but will return zeros for undefined registers.
5. UPS Models with the prefix SURTD support only read functionality via Modbus.
6. Registers are one word in size.
7. Signed numbers are two's complement.
8. Bit number 0 is least significant bit.
9. Writes to undefined registers will return an error.
10. Data Type column: "INT16" = signed 16-bit integer, "UINT16" = unsigned 16-bit integer, "INT32" = signed 32-bit integer, "UINT32" = unsigned 32-bit integer, "ENUM" is an INT16 or INT32 value (1 or 2 registers) that maps to a defined list of states, "ASCII" = the printable ASCII subset from 0x20 - 0x7E (2 characters per register, see end of map for additional info), "BOOLEAN" = a single bit, 0 or 1.
11. ASCII (Strings)
    - Unsupported strings will be filled with zeros (0x00).
    - Strings are not NULL terminated.
    - Unused characters at the end of a string will be filled with 0x20 (space).
    - When reading strings, the trailing spaces can be stripped.
    - When writing strings:
        - The string should be left-justified and padded with spaces to meet the size requirement.
        - It must only contain ASCII characters and it should not contain a NULL terminator.
        - No partial string writes are allowed.
12. "Absolute Starting Register Address" = 0 (the column heading used in this table) is equivalent to "Register 40001" in Modicon terminology, which is address zero when transmitted over the wire.
13. Individual bit support for the UPS models (SMX/SMT, SRT and SURTD) is only indicated for the UPSStatus_BF register. For other registers, support can vary among different models and different firmware revisions, so support is only indicated at the register level, not the individual bit level.

Use this Modbus Register Map for UPS models **SRC2KUXI**, **SRC3KUXI**, and **SRC3KUXIX709**. Supported registers for SRT model UPS also apply to those SRC models. For all other UPS models with the prefix SRC, use the Modbus Register Map entitled "*Modbus Register Map for Smart-UPS excluding models with prefix SMT, SMX, SURTD, and SRT*", available on **www.apc.com**.

**Note**: Temperature and Humidity sensors attached to the UIO port(s) of the AP9631 and AP9635 NMC are not supported via Modbus**.**

For detailed modbus configuration settings, please see:

- The *AP9635 User Guide*, and the *Modbus Documentation Addendum* on the APC website, **www.apc.com**
- **Application Note #176**, "Modbus Implementation in APC Smart-UPS" on the APC website, **www.apc.com**

For more information on the Modbus protocol, Modbus data formats, and Modbus troubleshooting, see **Application Note #168** "*Modbus Installation and Troubleshooting for AP9635 Network Management Card*", available on **www.apc.com**.

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40001 | 0000 | 0 | | UPSStatus_BF | 2 | | | The purpose of this register is to convey the mode of operation of the UPS at macro level. Anytime the value of this usage changes the UPSStatusChangeCause_EN usage will change as well. This usage is NOT intended to be a direct mapping to the internal UPS state machine. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | StatusChange-Modifier: Toggled as necessary to make the monitoring software aware of status changes that would otherwise not be obvious (so that the change cause usage will be acted upon). Example: changing between commanded bypass and manual bypass. Implementations can choose to toggle this bit at every transition, or only as necessary. Changes from 0 to 1 and from 1 to 0 must be acted upon. | | | | x |
| | | | 1 | | | BOOLEAN | | StateOnline-State: Indicates that the power for the output is being sourced from the input. Mutually exclusive with other state bits. | | x | x | x |
| | | | 2 | | | BOOLEAN | | StateOnBattery-State: Indicates that the power for the output is being sourced from the battery. Mutually exclusive with other state bits. | | x | x | x |
| | | | 3 | | | BOOLEAN | | StateBypass-State: Indicates that the output is being powered by the input, without any power being processed through the UPS electronics. Mutually exclusive with other state bits. | | | x | x |
| | | | 4 | | | BOOLEAN | | StateOutputOff-State: Indicates that the output is not powered through the UPS (including any internal bypass paths). Some examples are: Off because of Fault or Low-Battery. Mutually exclusive with other state bits. | | x | x | x |
| | | | 5 | | | BOOLEAN | | Fault-Modifier: Indicates that a fault of any severity (Warning, or Critical) is present in the system, which may have caused a transition. | | x | x | x |
| | | | 6 | | | BOOLEAN | | InputBad-Modifier: Indicates that the input is not acceptable. | | x | x | x |
| | | | 7 | | | BOOLEAN | | Test-Modifier: Indicates that a test is in progress. | | x | x | x |
| | | | 8 | | | BOOLEAN | | PendingOutputOn-Modifier: Indicates that the state is pending output on (either on line, on battery, or bypass). Should only be set in combination with StateOutputOff. | | x | x | x |
| | | | 9 | | | BOOLEAN | | PendingOutputOff-Modifier: Indicates that the state is pending output off. Set whenever the UPS is in process of turning off, or immediately when on battery for bad input. Will never be set in combination with StateOutputOff. When set, the monitoring software should watch RunTimeRemaining. When / if run time is less than or equal to the software's minimum run time threshold, the software should start the shutdown process. This bit may also be set in conditions other than above, e.g. in bypass due to fault. | | x | x | x |
| | | | 10 | | | BOOLEAN | | Commanded-Modifier: Indictates that UPS that user transferred to bypass, but UPS is still functioning. If Bypass fails, the Inverter will start up. | | | x | |
| | | | 11 | | | BOOLEAN | | Reserved | | | | |
| | | | 12 | | | BOOLEAN | | Reserved | | | | |
| | | | 13 | | | BOOLEAN | | HighEfficiency-Modifier: Indicates that the UPS is operating in a high efficiency mode (eg. green mode, Economy Mode, ECO Mode). | | x | x | |
| | | | 14 | | | BOOLEAN | | InformationalAlert-Modifier: Indicates that the UPS has an informational alert active (eg. Lifetime Status near end). | | x | | |
| | | | 15 | | | BOOLEAN | | FaultState-Modifier: Indicates that the UPS is operating in a fault state. | | x | x | |
| | | | 16 | | | BOOLEAN | | Reserved | | | | |
| | | | 17 | | | BOOLEAN | | Reserved | | | | |
| | | | 18 | | | BOOLEAN | | Reserved | | | | |
| | | | 19 | | | BOOLEAN | | MainsBadState-Modifier: Indicates that the UPS is operating in a state due to the Mains input not acceptable (eg.TempBypass or due to bad Mains input). | | | x | |
| | | | 20 | | | BOOLEAN | | FaultRecoveryState-Modifier: Indicates that the UPS is operating in a state due to recovery from a fault state. | | | x | |
| | | | 21 | | | BOOLEAN | | OverloadState-Modifier: Indicates that the UPS is operating in a state due to an overload. | | | x | |
| | | | 22 | | | BOOLEAN | | MaintenanceMode-Modifier: Indicates that the system is in Maintenance Mode. | | | | |
| | | | 23-31 | | | BOOLEAN | | Reserved | | | | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40003 | 0002 | 2 | | UPSStatusChangeCause_EN | 1 | ENUM | | Changes in this value without a corresponding change in UPSStatus_BF should be ignored. This usage is meant to capture the reason why the new status was achieved, not the reason why the old status is no longer valid. | ReadOnly | x | x | x |
| | | | | | | | | 0: SystemInitialization: Indicates that the present state is achieved due to microprocessor reset. Value at start-up. | | | | |
| | | | | | | | | 1: HighInputVoltage:A high input voltage condition caused the transition. | | | | |
| | | | | | | | | 2: LowInputVoltage: A low input voltage condition caused the transition. | | | | |
| | | | | | | | | 3: DistortedInput: A bad input condition (distorted voltage or unstable frequency, "turbo") caused the transition. | | | | |
| | | | | | | | | 4: RapidChangeOfInputVoltage: A rapid change in the input voltage ("dV/dt") caused the transition. | | | | |
| | | | | | | | | 5: HighInputFrequency: A high input frequency caused the transition. | | | | |
| | | | | | | | | 6: LowInputFrequency: A low input frequency caused the transition. | | | | |
| | | | | | | | | 7: FreqAndOrPhaseDifference: A difference in frequency and/or phase between the input and the system caused the transition. | | | | |
| | | | | | | | | 8: AcceptableInput: An acceptable input (both voltage and frequency) caused the transition. | | | | |
| | | | | | | | | 9: AutomaticTest: Indicates that a test has been initiated via the automatic timer in the UPS (or other programatic determination, e.g., power on). This can be any test, e.g., replace battery test or run time calibration. | | | | |
| | | | | | | | | 10: TestEnded: Indicates that a test has been either completed (successfully or unsuccessfully) or aborted to cause the transition. Note that the only aborted causes that will be captured with this value are the ones that result in the same status after the test has been aborted. For example, a load change during a run time calibration that causes the test to abort and the status to return to on-line. As opposed to a local UI command (off button) that causes the run time calibration to be aborted but the status does not change to on-line. | | | | |
| | | | | | | | | 11: LocalUICommand: Indicates the user pressed the on/off or other button locally to cause the transition. Includes local terminal mode interface if applicable. | | | | |
| | | | | | | | | 12: ProtocolCommand: Indicates that a command received over the smart interface has caused the state change. | | | | |
| | | | | | | | | 13: LowBatteryVoltage: A low battery voltage caused the transition. This would be used for low battery shutdown, but may also be used when transitioning between other states due to a low battery voltage criteria. | | | | |
| | | | | | | | | 14: GeneralError: A general error caused the transistion. GeneralError_BF usage contains the specific fault if still valid. | | | | |
| | | | | | | | | 15: PowerSystemError-A power system error caused the transistion. PowerSystemError_BF usage contains the specific fault if still valid. | | | | |
| | | | | | | | | 16: BatterySystemError: A battery system error caused the transistion. BatterySystemError_BF usage contains the specific fault if still valid. | | | | |
| | | | | | | | | 17: ErrorCleared: Indicates that the system changed states due to an error clearing. (Some errors may still exist but a state change occurred even with those errors present.). | | | | |
| | | | | | | | | 18: AutomaticRestart: Indicates that internal conditions have met to allow the output to turn on, after a battery depletion. (8051 may not use this one, because it requires EEPROM storage of the state). | | | | |
| | | | | | | | | 19: DistortedInverterOutput: Indicates that the system changed states due to a distorted waveform detected on the output ("turbo"). | | | | |
| | | | | | | | | 20: InverterOutputAcceptable: Indicates that the system changed states due to no further distortion on the output waveform. | | | | |
| | | | | | | | | 21: EPOInterface: Indicates that an input was received at the UPS through the EPO interface to turn off the output. | | | | |
| | | | | | | | | 22: InputPhaseDeltaOutOfRange: Indicates input phase delta is out of limit. | | | | |
| | | | | | | | | 23: InputNeutralNotConnected: Indicates that neutral leg is missing. | | | | |
| | | | | | | | | 24: ATSTransfer: Indicates that state change was caused due to ATS operation. | | | | |
| | | | | | | | | 25: ConfigurationChange: Indicates that state change was caused by a configuration change (eg. a change in AllowedOperatingMode_BF). | | | | |
| | | | | | | | | 26: AlertAsserted: An informational alert has caused the transistion. | | | | |
| | | | | | | | | 27: AlertCleared: Indicates that the system changed states due to an Informational alert acknowledge or cleared. | | | | |
| | | | | | | | | 28: PlugRatingExceeded: Indicates transition happened because Input current exceeded plug rating. Example: when operating in "boost" mode when input current exceeds line cord rating transition to battery. | | | | |
| | | | | | | | | 29: OutletGroupStateChange: Indicates the transition occured due to Main Outlet Group (MOG) or Switched Outlet Group (SOG) state change. | | | | |
| | | | | | | | | 30: FailureBypassExpired: Indicates that load was turned off due to inability to continue operating in failure bypass. | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40004 | 0003 | 3 | | MOG.OutletStatus_BF | 2 | | | The present status of the outlet group. Note: Process bits are defined for sequences of multiple state transitions and are not defined for single transitions. Process bits are mutually exclusive. State bits are mutually exclusive. | ReadOnly | x | x | |
| | | | 0 | | | BOOLEAN | | StateOn-State: Indicates the outlet is powered. Mutually exclusive with other state bits. | | | | |
| | | | 1 | | | BOOLEAN | | StateOff-State: Indicates the outlet is not powered. Mutually exclusive with other state bits. | | | | |
| | | | 2 | | | BOOLEAN | | ProcessReboot-Modifier: Indicates that a reboot command was issued and is still in progress. A reboot command can be issued by writing to the command bitfield or by writing timers. Mutually exclusive with other process bits. | | | | |
| | | | 3 | | | BOOLEAN | | ProcessShutdown-Modifier: Indicates that shutdown command was issued and is still in progress. A shutdown command can be issued by writing to the command bitfield or by writing timers. Mutually exclusive with other process bits. | | | | |
| | | | 4 | | | BOOLEAN | | ProcessSleep-Modifier: Indicates that a sleep command was issued and is still in progress. A sleep command can be issued by writing to the command bitfield, or by writing timers. Sleep is indicated rather than reboot if the StayOffCountdown_EN timer is initially loaded with a value greater than 300 seconds. Mutually exclusive with other process bits. | | | | |
| | | | 5 | | | BOOLEAN | | Reserved | | | | |
| | | | 6 | | | BOOLEAN | | Reserved | | | | |
| | | | 7 | | | BOOLEAN | | PendingLoadShed-Modifier: Indicates that one or more condition exists that could potentially could turn the outlet off. | | | | |
| | | | 8 | | | BOOLEAN | | PendingOnDelay-Modifier: Indicates the outlet has an active process that requires an on delay when switching an outlet from off to on. | | | | |
| | | | 9 | | | BOOLEAN | | PendingOffDelay-Modifier: Indicates the outlet has an active process that requires an off delay when switching an outlet from on to off. | | | | |
| | | | 10 | | | BOOLEAN | | PendingOnACPresence-Modifier: Indicates the outlet will not turn on unless AC input power is available. | | | | |
| | | | 11 | | | BOOLEAN | | PendingOnMinRuntime-Modifier: Indicates the outlet will not turn on unless sufficient runtime is available. | | | | |
| | | | 12 | | | BOOLEAN | | MemberGroupProcess1-Modifier: Indicates the outlet is participating in the 1st "group process command". | | | | |
| | | | 13 | | | BOOLEAN | | MemberGroupProcess2-Modifier: Indicates the outlet is participating in the 2nd "group process command". | | | | |
| | | | 14 | | | BOOLEAN | | LowRuntime-Modifier: Indicates the run time is below the setting for the outlet group. | | | | |
| | | | 15-31 | | | BOOLEAN | | Reserved | | | | |
| 40006 | 0005 | 5 | | Reserved | 1 | | | | ReadOnly | | | |
| 40007 | 0006 | 6 | | SOG[0].OutletStatus_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.OutletStatus_BF. | ReadOnly | x | x | |
| 40009 | 0008 | 8 | | Reserved | 1 | | | | ReadOnly | | | |
| 40010 | 0009 | 9 | | SOG[1].OutletStatus_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.OutletStatus_BF. | ReadOnly | x | x | |
| 40012 | 000B | 11 | | Reserved | 1 | | | | ReadOnly | | | |
| 40013 | 000C | 12 | | SOG[2].OutletStatus_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.OutletStatus_BF. | ReadOnly | x | x | |
| 40015-40018 | 000E-0011 | 14-17 | | Reserved | | | | | ReadOnly | | | |
| 40019 | 0012 | 18 | | SimpleSignalingStatus_BF | 1 | | | The Simple Signal Output register. This is what the actual simple signal port should have as output. This usage should only be used for hosting the simple signaling port. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | PowerFailure: Indicates that the input power has failed. Signal will be driven with output on or off. Complement of InputStatus.Acceptable. | | | | |
| | | | 1 | | | BOOLEAN | | ShutdownImminent: Indicates that the UPS is committed to disconnecting power from its output(s). The bit is set when UPSStatus_BF.PendingOutputOff is set AND RunTimeRemaining is less than or equal to LowRunTimeWarningSetting OR any of the following depending upon the UPS configuration:<br>* For UPS with an unswitched outlet group - when the MOG.TurnOffCountdown_EN is greater than -1.<br>* For UPS with no unswitched outlet group and with switched outlet group(s) - when the "last commanded" SOG[x].TurnOffCountdown_EN is greater than -1.<br><br>In response to this bit becoming set, the device using the simple signalling interface should drive request to shutdown, if it hasn't already done so (this ensures that TurnOffCountdown_EN timer will be set to at least the minimum time needed by the simple signaling host). | | | | |
| | | | 2-15 | | | BOOLEAN | | Reserved | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40020 | 0013 | 19 | | GeneralError_BF | 1 | | | Faults that are not contained in a more specific system fault usage. These may indicate current status or latched status depending upon the mode of operation of the UPS | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | SiteWiring: A site wiring fault exists. | | | | |
| | | | 1 | | | BOOLEAN | | EEPROM: A eeprom fault exists. | | | | |
| | | | 2 | | | BOOLEAN | | ADConverter: An A/D converter fault exists. | | | | |
| | | | 3 | | | BOOLEAN | | LogicPowerSupply: A logic power supply fault exists. | | | | |
| | | | 4 | | | BOOLEAN | | InternalCommunication: A fault in the processor communication system. | | | | |
| | | | 5 | | | BOOLEAN | | UIButton: One (or more) of the Front Panel Buttons is not working properly. | | | | |
| | | | 6 | | | BOOLEAN | | NeedsFactorySetup: Factory setup is required. Example: Board sets are mismatched. | | | | |
| | | | 7 | | | BOOLEAN | | EPOActive: There is an active or unacknowledged Emergency Power Off signal. | | | | |
| | | | 8 | | | BOOLEAN | | FirmwareMismatch: There is a mismatched firmware version, firmware upgrade is required. | | | | |
| | | | 9 | | | BOOLEAN | | Oscillator: The clock source for one or more microprocessors has failed. | | | | |
| | | | 10 | | | BOOLEAN | | MeasurementMismatch: There is a discrepancy between two or more redundant measurements. | | | | |
| | | | 11 | | | BOOLEAN | | Subsystem: A subsystem fault exists. | | | | |
| | | | 12 | | | BOOLEAN | | LogicPowerSupplyRelay: A logic power supply relay error exists. | | | | |
| | | | 13-15 | | | BOOLEAN | | Reserved | | | | |
| 40021 | 0014 | 20 | | PowerSystemError_BF | 2 | | | Faults in the power processing system. These may indicate current status or latched status depending upon the mode of operation of the UPS. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | OutputOverload:The output is overloaded (either real or apparent power). | | | | |
| | | | 1 | | | BOOLEAN | | OutputShortCircuit: The output is short circuited. | | | | |
| | | | 2 | | | BOOLEAN | | OutputOvervoltage: The output voltage is too high. | | | | |
| | | | 3 | | | BOOLEAN | | TransformerDCImbalance: The DC component of the transformer's current is too high. | | | | |
| | | | 4 | | | BOOLEAN | | Overtemperature: Indicates that a component's temperature is too high. | | | | |
| | | | 5 | | | BOOLEAN | | BackfeedRelay: The backfeed relay (or its driver) has a fault. | | | | |
| | | | 6 | | | BOOLEAN | | AVRRelay: An AVR relay (or its driver) has a fault. | | | | |
| | | | 7 | | | BOOLEAN | | PFCInputRelay: A PFC input relay (or its driver) has a fault. | | | | |
| | | | 8 | | | BOOLEAN | | OutputRelay: An output relay (or its driver) has a fault. | | | | |
| | | | 9 | | | BOOLEAN | | BypassRelay: A bypass relay (or its driver) has a fault. | | | | |
| | | | 10 | | | BOOLEAN | | Fan: A fan fault exists. | | | | |
| | | | 11 | | | BOOLEAN | | PFC: A PFC fault exists. | | | | |
| | | | 12 | | | BOOLEAN | | DCBusOvervoltage: A DC bus voltage is too high. | | | | |
| | | | 13 | | | BOOLEAN | | Inverter: An inverter fault exists. | | | | |
| | | | 14 | | | BOOLEAN | | OverCurrent: Bang-Bang or IGBT fault. | | | | |
| | | | 15 | | | BOOLEAN | | BypassPFCRelay: A Bypass PFC input relay (or its driver) has a fault. | | | | |
| | | | 16 | | | BOOLEAN | | BusSoftStart: A DC bus soft start fault exists. | | | | |
| | | | 17 | | | BOOLEAN | | GreenRelay: A green relay (or driver) fault exists. | | | | |
| | | | 18 | | | BOOLEAN | | DCOutput: A DC output fault exists. (eg. over or under voltage) | | | | |
| | | | 19 | | | BOOLEAN | | DCBusConverter: A DC bus converter fault exists. | | | | |
| | | | 20 | | | BOOLEAN | | Sensor: A sensor fault exists. (eg. heatsink temperature sensor is disconnected) | | | | |
| | | | 21-31 | | | BOOLEAN | | Reserved | | | | |
| 40023 | 0016 | 22 | | BatterySystemError_BF | 1 | | | Faults in the battery system. These may indicate current status or latched status depending upon the mode of operation of the UPS. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | Disconnected: Indicates that the battery is electrically disconnected (missing). | | | | |
| | | | 1 | | | BOOLEAN | | Overvoltage: Indicates that the battery voltage is too high. | | | | |
| | | | 2 | | | BOOLEAN | | NeedsReplacement: Indicates that the battery is at the end of its service life. | | | | |
| | | | 3 | | | BOOLEAN | | OvertemperatureCritical: Indicates that the battery temperature has exceeded a critical level. (Exclusive with OvertemperatureWarning) | | | | |
| | | | 4 | | | BOOLEAN | | Charger: A battery charger fault exists. | | | | |
| | | | 5 | | | BOOLEAN | | TemperatureSensor: A battery temperature sensor fault exists. | | | | |
| | | | 6 | | | BOOLEAN | | BusSoftStart: A battery bus soft start fault exists. | | | | |
| | | | 7 | | | BOOLEAN | | OvertemperatureWarning: Indicates that the battery temperature has exceeded a warning level. (Exclusive with OvertemperatureCritical) | | | | |
| | | | 8 | | | BOOLEAN | | GeneralError: A specific error cannot be determined. | | | | |
| | | | 9 | | | BOOLEAN | | Communication: A communication error between the battery subsystem and the host. | | | | |
| | | | 10 | | | BOOLEAN | | DisconnectedFrame: Indicates that one or more battery frames are electrically disconnected (missing). | | | | |
| | | | 11 | | | BOOLEAN | | FirmwareMismatch: There is a mismatched firmware version, firmware upgrade is required. | | | | |
| | | | 12 | | | BOOLEAN | | VoltageSenseError: Indicates that there is a sensing error with the battery voltage. | | | | |
| | | | 13-15 | | | BOOLEAN | | Reserved | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40024 | 0017 | 23 | | ReplaceBatteryTestStatus_BF | 1 | | | This is the result of the ReplaceBatteryTest, or internal test. This usage should be used for logging purposes. The pass / fail result of the replace battery test will directly affect the BatterySystemError_BF -> NeedsReplacement bit. This usage is sticky, and remembers last state until a new status is generated. Upon initialization, all bits may be reset. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | Pending: Replace battery test is pending (high level acknowledgement of command). | | | | |
| | | | 1 | | | BOOLEAN | | InProgress: Replace battery test is in progress. | | | | |
| | | | 2 | | | BOOLEAN | | Passed: Replace battery test passed (completed successfully). | | | | |
| | | | 3 | | | BOOLEAN | | Failed: Replace battery test failed (completed unsuccessfully). | | | | |
| | | | 4 | | | BOOLEAN | | Refused: Replace battery test was refused (check "result modifier" bits for potentially additional details). | | | | |
| | | | 5 | | | BOOLEAN | | Aborted: Replace battery test was aborted (check "result modifier" and "source modifier" bits for potentially additional details). | | | | |
| | | | 6 | | | BOOLEAN | | Protocol-Source modifier: the protocol is the origin for initiation or abortion of the replace battery test. | | | | |
| | | | 7 | | | BOOLEAN | | LocalUI-Source modifier: the local user interface is the origin for initiation or abortion of the replace battery test. Includes local terminal mode interface if applicable. | | | | |
| | | | 8 | | | BOOLEAN | | Internal-Source modifier: internal control is the origin for initiation or abortion of the replace battery test. | | | | |
| | | | 9 | | | BOOLEAN | | InvalidState-Result modifier: invalid UPS operating state (e.g., shutdown pending, output off, UPS in bypass, input voltage not acceptable). | | | | |
| | | | 10 | | | BOOLEAN | | InternalFault-Result modifier: an internal fault exists (e.g., battery is missing, inverter failure). Also, overload in progress which is not in the error usages. | | | | |
| | | | 11 | | | BOOLEAN | | StateOfChargeNotAcceptable-Result modifier: the battery state of charge is not acceptable. | | | | |
| | | | 12-15 | | | BOOLEAN | | Reserved | | | | |
| 40025 | 0018 | 24 | | RunTimeCalibrationStatus_BF | 1 | | | This is the result of the RunTimeCalCommand_BF. This usage should be used for logging purposes. This usage is sticky, and remembers last value until a new value is generated. Upon initialization, all bits may be reset. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | Pending: Run time calibration is pending (high level acknowledgement of command). | | | | |
| | | | 1 | | | BOOLEAN | | InProgress: Run time calibration is in progress. | | | | |
| | | | 2 | | | BOOLEAN | | Passed: Run time calibration passed (completed successfully). | | | | |
| | | | 3 | | | BOOLEAN | | Failed: Run time calibration failed (completed unsuccessfully). | | | | |
| | | | 4 | | | BOOLEAN | | Refused: Run time calibration was refused (check "result modifier" bits for potential additional details). | | | | |
| | | | 5 | | | BOOLEAN | | Aborted: Run time calibration was aborted (check "result modifier" and "source modifier" bits for potentially additional details). | | | | |
| | | | 6 | | | BOOLEAN | | Protocol-Source modifier: the protocol is the origin for initiation or abortion of the run time calibration. | | | | |
| | | | 7 | | | BOOLEAN | | LocalUI-Source modifier: the local user interface is the origin for initiation or abortion of the run time calibration. Includes local terminal mode interface if applicable. | | | | |
| | | | 8 | | | BOOLEAN | | Internal-Source modifier: internal control is the origin for initiation or abortion of the run time calibration.<br>Note: Internal should be reported if there is a "scheduled" internal test eg. every 3 months. Internal should also be used when a "natural" test completes successfully. | | | | |
| | | | 9 | | | BOOLEAN | | InvalidState-Result modifier: invalid UPS operating state (e.g., shutdown pending, output off, ups in bypass, input voltage not acceptable). | | | | |
| | | | 10 | | | BOOLEAN | | InternalFault-Result modifier: an internal fault exists (e.g., battery is missing, inverter failure). Also, overload in progress which is not in the error usages. | | | | |
| | | | 11 | | | BOOLEAN | | StateOfChargeNotAcceptable-Result modifier: the battery state of charge is not acceptable. | | | | |
| | | | 12 | | | BOOLEAN | | LoadChange-Result modifier: the load changed. | | | | |
| | | | 13 | | | BOOLEAN | | ACInputNotAcceptable-Result modifier: the AC input is not acceptable so the run time calibration was aborted. | | | | |
| | | | 14 | | | BOOLEAN | | LoadTooLow-Result modifier: the load is too low to recalibrate the run time accurately. | | | | |
| | | | 15 | | | BOOLEAN | | OverChargeInProgress-Result modifier: a battery overcharge is currently in progress, therefore the run time calibration is refused (to prevent an inaccurate result). | | | | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40026 | 0019 | 25 | | Battery.LifeTimeStatus_BF | 1 | | | Status of predictive maintenance for the battery. | ReadOnly | x | x | |
| | | | 0 | | | BOOLEAN | | LifeTimeStatusOK: Lifetime is OK. Mutually exclusive with bits 1 and 2. | | | | |
| | | | 1 | | | BOOLEAN | | LifeTimeNearEnd: Lifetime is near end. Mutually exclusive with bits 0 and 2. | | | | |
| | | | 2 | | | BOOLEAN | | LifeTimeExceeded: Lifetime is exceeded. Mutually exclusive with bits 0 and 1. | | | | |
| | | | 3 | | | BOOLEAN | | LifeTimeNearEndAcknowledged: Alert has been acknowledged but still exists. | | | | |
| | | | 4 | | | BOOLEAN | | LifeTimeExceededAcknowledged: Alert has been acknowledged but still exists. | | | | |
| | | | 5 | | | BOOLEAN | | MeasuredLifeTimeNearEnd: The measured liifetime is near the end. For a battery this is when the capacity is nearing the threshold for replacement. Mutually exclusive with bit 5, and can be indicated independently of bits 1 and 2. | | | | |
| | | | 6 | | | BOOLEAN | | MeasuredLifeTimeNearEndAcknowledged: Alert has been acknowledged but still exists. | | | | |
| | | | 7-15 | | | BOOLEAN | | Reserved | | | | |
| 40027 | 001A | 26 | | UserInterfaceStatus_BF | 1 | | | Status of local User Interface (both audible and visible). | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | ContinuousTestInProgress: The continuous local UI test is in progress. | | | | |
| | | | 1 | | | BOOLEAN | | AudibleAlarmInProgress: There is an active alarm that is causing the local UI beeper to sound. This bit indicates that the command to mute is available. | | | | |
| | | | 2 | | | BOOLEAN | | AudibleAlarmMuted: There is an active alarm that is currently being muted. This bit indicates that the command to cancel mute is available. | | | | |
| | | | 3 | | | BOOLEAN | | AnyButtonPressedRecently: A user interface button has been pressed within the last 10 seconds. | | | | |
| | | | 4-15 | | | BOOLEAN | | Reserved | | | | |
| | | | | | | | | | | | | |
| 40129 | 0080 | 128 | | RunTimeRemaining | 2 | UINT32 | 1 | The number of seconds until power will go out, when running on battery. This should never be compared as an actual value, but should be compared as "less than or equal to." Some UPS's will max out at 65535 seconds (18.2 hours). | ReadOnly | x | x | x |
| 40131 | 0082 | 130 | | StateOfCharge_Pct | 1 | UINT16 | 512 | The percent state of charge in the battery. | ReadOnly | x | x | x |
| 40132 | 0083 | 131 | | Battery.Positive.VoltageDC | 1 | INT16 | 32 | Measured battery voltage - positive battery bus. | ReadOnly | x | x | x |
| 40133 | 0084 | 132 | | Battery.Negative.VoltageDC | 1 | INT16 | 32 | Measured battery voltage - negative battery bus. | ReadOnly | | x | |
| 40134 | 0085 | 133 | | Battery.Date | 1 | UINT16 | 1 | Theoretical battery replacement date, days since 1999 (January 1, 2000 = 0). It should not be interpreted to be more accurate than a month. | ReadOnly | x | x | x |
| 40135 | 0086 | 134 | | Reserved | 1 | | | | ReadOnly | | | |
| 40136 | 0087 | 135 | | Battery.Temperature | 1 | INT16 | 128 | Battery temperature in Degrees C. | ReadOnly | x | x | x |
| 40137 | 0088 | 136 | | Output[0].RealPower_Pct | 1 | UINT16 | 256 | Phase 1 - Measured real power as a percent of full rating. | ReadOnly | x | x | x |
| 40138 | 0089 | 137 | | Output[1].RealPower_Pct | 1 | UINT16 | 256 | Phase 2 - Measured real power as a percent of full rating. | ReadOnly | | | x |
| 40139 | 008A | 138 | | Output[0].ApparentPower_Pct | 1 | UINT16 | 256 | Phase 1 - Measured apparent power as a percent of full rating. | ReadOnly | x | x | x |
| 40140 | 008B | 139 | | Output[1].ApparentPower_Pct | 1 | UINT16 | 256 | Phase 2 - Measured apparent power as a percent of full rating. | ReadOnly | | | x |
| 40141 | 008C | 140 | | Output[0].CurrentAC | 1 | UINT16 | 32 | Phase 1 - Measured AC RMS Current. | ReadOnly | x | x | x |
| 40142 | 008D | 141 | | Output[1].CurrentAC | 1 | UINT16 | 32 | Phase 2 - Measured AC RMS Current. | ReadOnly | | | x |
| 40143 | 008E | 142 | | Output[0].VoltageAC | 1 | UINT16 | 64 | Phase 1 - Measured Output Voltage. | ReadOnly | x | x | x |
| 40144 | 008F | 143 | | Output[1].VoltageAC | 1 | UINT16 | 64 | Phase 2 - Measured Output Voltage. | ReadOnly | | | x |
| 40145 | 0090 | 144 | | Output.Frequency | 1 | UINT16 | 128 | Measured frequency on the output. | ReadOnly | x | x | x |
| 40146 | 0091 | 145 | | Output.Energy | 2 | UINT16 | 1 | This is the number of Watt Hours consumed by the output load. | ReadOnly | x | x | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40148 | 0093 | 147 | | Bypass.InputStatus_BF | 1 | | | Indicates the status of the input voltage for logging data point NOT for event. These bits are not mutually exclusive. Note that there may be times when no bits are set. This usage reflects the status of the input voltage for normal operation when in the input system collection and it reflects the status of the input voltage for bypass operation when in the bypass system collection. | ReadOnly | | x | x |
| | | | 0 | | | BOOLEAN | | Acceptable: Input (both voltage and frequency) is acceptable and all other system constraints are met so that the UPS can power the output with this input source. | | | | |
| | | | 1 | | | BOOLEAN | | PendingAcceptable: Input (both voltage and frequency) is acceptable but at least one other system constraint is not met preventing the line from being declared acceptable (e.g. line is not stable for a long enough time). | | | | |
| | | | 2 | | | BOOLEAN | | VoltageTooLow: Indicates that the input voltage is too low to be acceptable. | | | | |
| | | | 3 | | | BOOLEAN | | VoltageTooHigh: Indicates that the input voltage is too high to be acceptable. | | | | |
| | | | 4 | | | BOOLEAN | | Distorted: Indicates a distorted input waveform. The input voltage is too different from reference waveform, the frequency is moving too fast to track, or the frequency is out of measurable range. | | | | |
| | | | 5 | | | BOOLEAN | | Boost: Indicates that the UPS is attempting to amplify the input voltage. Not applicable for bypass input. | | | | |
| | | | 6 | | | BOOLEAN | | Trim: Indicates that the UPS is attempting to attenuate the input voltage. Not applicable for bypass input. | | | | |
| | | | 7 | | | BOOLEAN | | FrequencyTooLow: Indicates frequency is measurably too low. | | | | |
| | | | 8 | | | BOOLEAN | | FrequencyTooHigh: Indicates frequency is measurably too high. | | | | |
| | | | 9 | | | BOOLEAN | | FreqAndPhaseNotLocked: Indicates that the system is not frequency and phase locked to the input frequency and phase. | | | | |
| | | | 10 | | | BOOLEAN | | PhaseDeltaOutOfRange: Indicates that the difference in phase angle between phases is out of range. | | | | |
| | | | 11 | | | BOOLEAN | | NeutralNotConnected-Indicates that the Neutral connection is missing. | | | | |
| | | | 12 | | | BOOLEAN | | Reserved | | | | |
| | | | 13 | | | BOOLEAN | | Reserved | | | | |
| | | | 14 | | | BOOLEAN | | Reserved | | | | |
| | | | 15 | | | BOOLEAN | | PoweringLoad: This bit indicates that the input is the source of power to the load. eg. BypassSystem.InputStatus_BF.PoweringLoad indicates the power for the load is from the bypass source. | | | | |
| 40149 | 0094 | 148 | | Bypass.VoltageAC | 1 | UINT16 | 64 | Measured Voltage on the bypass input for separate bypass feed. | ReadOnly | | x | |
| 40150 | 0095 | 149 | | Bypass.Frequency | 1 | UINT16 | 128 | Measured frequency on the bypass input for separate bypass feed. | ReadOnly | | x | |
| 40151 | 0096 | 150 | | Input.InputStatus_BF | 1 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR Bypass.InputStatus_BF. | ReadOnly | x | x | x |
| 40152 | 0097 | 151 | | Input[0].VoltageAC | 1 | UINT16 | 64 | Phase 1 - Measured Input Voltage. | ReadOnly | x | x | x |
| 40153 | 0098 | 152 | | Input[1].VoltageAC | 1 | UINT16 | 64 | Phase 2 - Measured Input Voltage. | ReadOnly | | x | x |
| 40154 | 0099 | 153 | | Input[2].VoltageAC | 1 | UINT16 | 64 | Phase 3 - Measured Input Voltage. | ReadOnly | | x | |
| 40155 | 009A | 154 | | Efficiency_EN | 1 | ENUM | | Efficiency is defined as RealPowerOut / RealPowerIn. Apparent Power (VA) measurements should not be used. | ReadOnly | x | x | |
| | | | | | | | 128 | 0-32768: Efficiency percentage (note divisor so for example 12800 is 100%). | | | | |
| | | | | | | | 1 | -1: NotAvailable: This is reported when the efficiency is unavailable or extremely low and a more specific reason is not known or supported. | | | | |
| | | | | | | | 1 | -2: LoadTooLow: Load is too low to report efficiency. | | | | |
| | | | | | | | 1 | -3: OutputOff: The output is off and efficiency is 0. | | | | |
| | | | | | | | 1 | -4: OnBattery: Efficiency not measured or calculated in this mode. | | | | |
| | | | | | | | 1 | -5: InBypass: Efficiency not measured or calculated in this mode. | | | | |
| | | | | | | | 1 | -6: BatteryCharging: Battery is charging and is adversely affecting the efficiency. | | | | |
| | | | | | | | 1 | -7: PoorACInput: The main input supply is outside of range which will result in optimal efficiency. | | | | |
| | | | | | | | 1 | -8: BatteryDisconnected: The battery is disconnected and is adversely affecting the efficiency. | | | | |
| 40156 | 009B | 155 | | MOG.TurnOffCountdown_EN | 1 | ENUM | 1 | Time remaining until output off for Main Outlet Group (MOG).<br>-1: NotActive_Cancel: Reading: no countdown in progress. Writing: cancel shutdown.<br>0: CountdownExpired, Countdown has ended.<br>(1)-(32767): Seconds remaining for countdown. | ReadOnly | x | x | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40157 | 009C | 156 | | MOG.TurnOnCountdown_EN | 1 | ENUM | 1 | Time remaining until output on for Main Outlet Group (MOG).<br>-1: NotActive_Cancel: Reading: no countdown in progress. Writing: cancel countdown.<br>0: CountdownExpired, Countdown has ended.<br>(1)-(32767): Seconds remaining for countdown. | ReadOnly | x | x | |
| 40158 | 009D | 157 | | MOG.StayOffCountdown_EN | 2 | ENUM | 1 | Minimum time to remain off after a shutdown for Main Outlet Group (MOG).<br>-1: NotActive. No countdown in progress.<br>0: CountdownExpired. Countdown has ended.<br>(1)-(2147483647): Seconds remaining for countdown. | ReadWrite | x | x | |
| 40160 | 009F | 159 | | SOG[0].TurnOffCountdown_EN | 1 | ENUM | 1 | Time remaining until output off for Switched Outlet Group SOG0.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOffCountdown_EN. | ReadOnly | x | x | |
| 40161 | 00A0 | 160 | | SOG[0].TurnOnCountdown_EN | 1 | ENUM | 1 | Time remaining until output on for Switched Outlet Group SOG0.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOnCountdown_EN. | ReadOnly | x | x | |
| 40162 | 00A1 | 161 | | SOG[0].StayOffCountdown_EN | 2 | ENUM | 1 | Minimum time to remain off after a shutdown for Switched Outlet Group SOG0.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.StayOffCountdown_EN. | ReadWrite | x | x | |
| 40164 | 00A3 | 163 | | SOG[1].TurnOffCountdown_EN | 1 | ENUM | 1 | Time remaining until output off for Switched Outlet Group SOG1.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOffCountdown_EN. | ReadOnly | x | x | |
| 40165 | 00A4 | 164 | | SOG[1].TurnOnCountdown_EN | 1 | ENUM | 1 | Time remaining until output on for Switched Outlet Group SOG1.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOnCountdown_EN. | ReadOnly | x | x | |
| 40166 | 00A5 | 165 | | SOG[1].StayOffCountdown_EN | 2 | ENUM | 1 | Minimum time to remain off after a shutdown for Switched Outlet Group SOG1.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.StayOffCountdown_EN. | ReadWrite | x | x | |
| 40168 | 00A7 | 167 | | SOG[2].TurnOffCountdown_EN | 1 | ENUM | 1 | Time remaining until output off for Switched Outlet Group SOG2.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOffCountdown_EN. | ReadOnly | x | x | |
| 40169 | 00A8 | 168 | | SOG[2].TurnOnCountdown_EN | 1 | ENUM | 1 | Time remaining until output on for Switched Outlet Group SOG 2.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.TurnOnCountdown_EN. | ReadOnly | x | x | |
| 40170 | 00A9 | 169 | | SOG[2].StayOffCountdown_EN | 2 | ENUM | 1 | Minimum time to remain off after a shutdown for Switched Outlet Group SOG2.<br>SEE ENUM DESCRIPTION ABOVE FOR MOG.StayOffCountdown_EN. | ReadWrite | x | x | |
| | | | | | | | | | | | | |
| 40517 | 0204 | 516 | | FWVersion_STR | 8 | ASCII | | UPS Firmware Version. | ReadOnly | x | x | x |
| 40525 | 020C | 524 | | Reserved | 8 | | | | ReadOnly | | | |
| 40533 | 0214 | 532 | | Model_STR | 16 | ASCII | | UPS Model Name. | ReadOnly | x | x | x |
| 40549 | 0224 | 548 | | SKU_STR | 16 | ASCII | | UPS SKU Name. | ReadOnly | x | x | x |
| 40565 | 0234 | 564 | | SerialNumber_STR | 8 | ASCII | | UPS Serial Number. | ReadOnly | x | x | x |
| 40573 | 023C | 572 | | Battery.SKU_STR | 8 | ASCII | | The replacement battery pack SKU for the internal battery pack (or the system, if there is only one type). | ReadOnly | x | x | |
| 40581 | 0244 | 580 | | Battery.ExternalBattery.SKU_STR | 8 | ASCII | | The replacement battery pack SKU for the external battery pack. | ReadOnly | x | | |
| 40589 | 024C | 588 | | Output.ApparentPowerRating | 1 | UINT16 | 1 | The rated apparent full power. | ReadOnly | x | x | x |
| 40590 | 024D | 589 | | Output.RealPowerRating | 1 | UINT16 | 1 | The rated real full power. | ReadOnly | x | x | x |
| 40591 | 024E | 590 | | SOGRelayConfigSetting_BF | 1 | | | Indicates UPS's outlet group configuration. | ReadOnly | x | x | |
| | | | 0 | | | BOOLEAN | | MOGPresent: A user accessible Main Outlet Group (MOG) is present. | | | | |
| | | | 1 | | | BOOLEAN | | SOG0Present: Switched Outlet Group SOG0 is present. | | | | |
| | | | 2 | | | BOOLEAN | | SOG1Present: SOG 1 is present. | | | | |
| | | | 3 | | | BOOLEAN | | SOG2Present: SOG 2 is present. | | | | |
| | | | 4 | | | BOOLEAN | | SOG3Present: SOG 3 is present. | | | | |
| | | | 5-15 | | | BOOLEAN | | Reserved | | | | |
| 40592 | 024F | 591 | | Manufacture.Date | 1 | UINT16 | 1 | Manufacture Date, days since 1999 (January 1, 2000 = 0). | ReadOnly | x | x | x |
| 40593 | 0250 | 592 | | Output.VoltageACSetting_BF* | 1 | | | This is the configured output voltage setting. This is still implemented when there is only one voltage setting. This field may not show all values (see register 644). | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | VAC100: Output voltage 100VAC. | | | | |
| | | | 1 | | | BOOLEAN | | VAC120: Output voltage 120VAC. | | | | |
| | | | 2 | | | BOOLEAN | | VAC200: Output voltage 200VAC. | | | | |
| | | | 3 | | | BOOLEAN | | VAC208: Output voltage 208VAC. | | | | |
| | | | 4 | | | BOOLEAN | | VAC220: Output voltage 220VAC. | | | | |
| | | | 5 | | | BOOLEAN | | VAC230: Output voltage 230VAC. | | | | |
| | | | 6 | | | BOOLEAN | | VAC240: Output voltage 240VAC. | | | | |
| | | | 7 | | | BOOLEAN | | Reserved | | | | |
| | | | 8 | | | BOOLEAN | | Reserved | | | | |
| | | | 9 | | | BOOLEAN | | Reserved | | | | |
| | | | 10 | | | BOOLEAN | | Reserved | | | | |
| | | | 11 | | | BOOLEAN | | VAC110: Output voltage 110VAC. | | | | |
| | | | 12 | | | BOOLEAN | | Reserved | | | | |
| | | | 13 | | | BOOLEAN | | VACAuto120_208or240: Output voltage 120VAC Phase-Neutral and automatically selected 208 or 240 based on the input. | | | | |
| | | | 14 | | | BOOLEAN | | VAC120_208: Output voltage 120VAC Phase-Neutral and 208 | | | | |
| | | | 15 | | | BOOLEAN | | VAC120_240: Output voltage 120VAC Phase-Neutral and 240 | | | | |

*** Supported in NMC for Smart-UPS firmware v6.4.6 and higher, with AP9630/31/35**

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40594 | 0251 | 593 | | Output.AcceptableFrequencySetting_BF | 1 | BOOLEAN | | This is the output frequency setting including the tolerance. This drives whether the output is in sync with the input. | ReadWrite | | x | x |
| | | | 0 | | | BOOLEAN | | Auto: Automatic selection of 50/60Hz (47-53, 57-63). | | | | |
| | | | 1 | | | BOOLEAN | | Hz50_0_1: Frequency of 50 Hz +/- 0.1 Hz. | | | | |
| | | | 2 | | | BOOLEAN | | Reserved | | | | |
| | | | 3 | | | BOOLEAN | | Hz50_3_0: Frequency of 50 Hz +/- 3.0 Hz. | | | | |
| | | | 4 | | | BOOLEAN | | Hz60_0_1: Frequency of 60 Hz +/- 0.1 Hz. | | | | |
| | | | 5 | | | BOOLEAN | | Reserved | | | | |
| | | | 6 | | | BOOLEAN | | Hz60_3_0: Frequency of 60 Hz +/- 3.0 Hz. | | | | |
| | | | 7-15 | | | BOOLEAN | | Reserved | | | | |
| 40595 | 0252 | 594 | | Reserved | 1 | | | | ReadOnly | | | |
| 40596 | 0253 | 595 | | Battery.DateSetting | 1 | UINT16 | | Battery Installation Date, days since 1999 (January 1, 2000 = 0). | ReadWrite | x | x | x |
| 40597 | 0254 | 596 | | Name_STR | 8 | ASCII | | The name assigned to the UPS. | ReadWrite | x | x | |
| 40605 | 025C | 604 | | MOG.Name_STR | 8 | ASCII | | The name assigned to the Main Outlet Group (MOG). | ReadWrite | x | x | |
| 40613 | 0264 | 612 | | SOG[0].Name_STR | 8 | ASCII | | The name assigned to Switched Outlet Group SOG0. | ReadWrite | x | x | |
| 40621 | 026C | 620 | | SOG[1].Name_STR | 8 | ASCII | | The name assigned to SOG 1. | ReadWrite | x | x | |
| 40629 | 0274 | 628 | | SOG[2].Name_STR | 8 | ASCII | | The name assigned to SOG 2. | ReadWrite | x | x | |
| 40637 | 027C | 636 | | Reserved | 8 | | | | ReadOnly | | | |
| 40645 | 0284 | 644 | | Output.VoltageACSetting_BF | 2 | | | This is the configured output voltage setting. This is still implemented when there is only one voltage setting. | ReadOnly | x | x | x |
| | | | 0 | | | BOOLEAN | | VAC100: Output voltage 100VAC. | | | | |
| | | | 1 | | | BOOLEAN | | VAC120: Output voltage 120VAC. | | | | |
| | | | 2 | | | BOOLEAN | | VAC200: Output voltage 200VAC. | | | | |
| | | | 3 | | | BOOLEAN | | VAC208: Output voltage 208VAC. | | | | |
| | | | 4 | | | BOOLEAN | | VAC220: Output voltage 220VAC. | | | | |
| | | | 5 | | | BOOLEAN | | VAC230: Output voltage 230VAC. | | | | |
| | | | 6 | | | BOOLEAN | | VAC240: Output voltage 240VAC. | | | | |
| | | | 7 | | | BOOLEAN | | Reserved | | | | |
| | | | 8 | | | BOOLEAN | | Reserved | | | | |
| | | | 9 | | | BOOLEAN | | Reserved | | | | |
| | | | 10 | | | BOOLEAN | | Reserved | | | | |
| | | | 11 | | | BOOLEAN | | VAC110: Output voltage 110VAC. | | | | |
| | | | 12 | | | BOOLEAN | | Reserved | | | | |
| | | | 13 | | | BOOLEAN | | VACAuto120_208or240: Output voltage 120VAC Phase-Neutral and automatically selected 208 or 240 based on the input. | | | | |
| | | | 14 | | | BOOLEAN | | VAC120_208: Output voltage 120VAC Phase-Neutral and 208 | | | | |
| | | | 15 | | | BOOLEAN | | VAC120_240: Output voltage 120VAC Phase-Neutral and 240 | | | | |
| | | | 16 | | | BOOLEAN | | VAC100_200: Output voltage 100VAC Phase-Neutral and 200 | | | | |
| | | | 17-31 | | | BOOLEAN | | Reserved | | | | |
| | | | | | | | | | | | | |
| 41025 | 0400 | 1024 | | BatteryTestIntervalSetting_BF | 1 | | | Time between UPS self tests. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | Never: Do not perform battery test. | | | | |
| | | | 1 | | | BOOLEAN | | OnStartUpOnly: Only perform battery test on UPS powerup. | | | | |
| | | | 2 | | | BOOLEAN | | OnStartUpPlus7: Perform battery test on UPS powerup and every 7 days thereafter (if UPS is on line or on battery). 7 day timer is loaded at turn on and reloaded upon timeout. | | | | |
| | | | 3 | | | BOOLEAN | | OnStartUpPlus14 : Perform battery test on UPS powerup and every 14 days thereafter (if UPS is on line or on battery). 14 day timer is loaded at turn on and reloaded upon timeout. | | | | |
| | | | 4 | | | BOOLEAN | | OnStartUp7Since: Perform battery test on UPS powerup and every 7 days after start of last test (if UPS is on line or on battery). 7 day timer is loaded at turn on. It is reloaded upon timeout or when a test is commanded. | | | | |
| | | | 5 | | | BOOLEAN | | OnStartUp14Since: Perform battery test on UPS powerup and every 14 days after start of last test (if UPS is on line or on battery). 14 day timer is loaded at turn on. It is reloaded upon timeout or when a test is commanded. | | | | |
| | | | 6-15 | | | BOOLEAN | | Reserved | | | | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41026 | 0401 | 1025 | | Reserved | 1 | | | | ReadOnly | | | |
| 41027 | 0402 | 1026 | | Output.UpperAcceptableVoltageSetting | 1 | UINT16 | 1 | This is the upper limit of the acceptable voltage. The "upper transfer point" (highest voltage load will see). | ReadWrite | x | x | |
| 41028 | 0403 | 1027 | | Output.LowerAcceptableVoltageSetting | 1 | UINT16 | 1 | This is the lower limit of the acceptable voltage. The "lower transfer point" (lowest voltage load will see). | ReadWrite | x | x | |
| 41029 | 0404 | 1028 | | Output.SensitivitySetting_BF | 1 | | | Sets the UPS sensitivity to line conditions. | ReadWrite | x | | |
| | | | 0 | | | BOOLEAN | | Normal: allows the minimum input deviations to be seen by the load. | | | | |
| | | | 1 | | | BOOLEAN | | Reduced: allows more input deviations to be seen by the load than Normal setting. | | | | |
| | | | 2 | | | BOOLEAN | | Low: allows maximum input deviations to be seen by the load. | | | | |
| | | | 3-15 | | | BOOLEAN | | Reserved | | | | |
| 41030 | 0405 | 1029 | | MOG.TurnOffCountdownSetting_EN | 1 | ENUM | 1 | For Main Outlet Group (MOG): Seconds of delay to use for an off. This value will be loaded into the TurnOffCountdown_EN when a delayed off command is requested. | ReadWrite | x | x | |
| 41031 | 0406 | 1030 | | MOG.TurnOnCountdownSetting_EN | 1 | ENUM | 1 | For MOG: Seconds of delay to use for an on. This value will be loaded into the TurnOnCountdown_EN when a delayed on command is requested. | ReadWrite | x | x | |
| 41032 | 0407 | 1031 | | MOG.StayOffCountdownSetting_4B | 2 | INT32 | 1 | For MOG: Seconds to keep an output off before starting it again. Typically minimum value of 4, maximum of 300. | ReadWrite | x | x | |
| 41034 | 0409 | 1033 | | MOG.MinimumReturnRuntimeSetting | 1 | UINT16 | 1 | For MOG: The minimum amount of runtime required before the output will be turned on, using power calculation captured at start of last shutdown. | ReadWrite | x | x | |
| 41035 | 040A | 1034 | | SOG[0].TurnOffCountdownSetting_EN | 1 | ENUM | 1 | For Switched Outlet Group SOG0: Seconds of delay to use for an off. This value will be loaded into the TurnOffCountdown_EN when a delayed off command is requested. | ReadWrite | x | x | |
| 41036 | 040B | 1035 | | SOG[0].TurnOnCountdownSetting_EN | 1 | ENUM | 1 | For SOG0: Seconds of delay to use for an on. This value will be loaded into the TurnOnCountdown_EN when a delayed on command is requested. | ReadWrite | x | x | |
| 41037 | 040C | 1036 | | SOG[0].StayOffCountdownSetting_4B | 2 | INT32 | 1 | For SOG0: Seconds to keep an output off before starting it again. Typically minimum value of 4, maximum of 300. | ReadWrite | x | x | |
| 41039 | 040E | 1038 | | SOG[0].MinimumReturnRuntimeSetting | 1 | UINT16 | 1 | For SOG0: The minimum amount of run time required before the output will be turned on, using power calculation captured at start of last shutdown. | ReadWrite | x | x | |
| 41040 | 040F | 1039 | | SOG[1].TurnOffCountdownSetting_EN | 1 | ENUM | 1 | For SOG1: Seconds of delay to use for an off. This value will be loaded into the TurnOffCountdown_EN when a delayed off command is requested. | ReadWrite | x | x | |
| 41041 | 0410 | 1040 | | SOG[1].TurnOnCountdownSetting_EN | 1 | ENUM | 1 | For SOG1: Seconds of delay to use for an on. This value will be loaded into the TurnOnCountdown_EN when a delayed on command is requested. | ReadWrite | x | x | |
| 41042 | 0411 | 1041 | | SOG[1].StayOffCountdownSetting_4B | 2 | INT32 | 1 | For SOG1: Seconds to keep an output off before starting it again. Typically minimum value of 4, maximum of 300. | ReadWrite | x | x | |
| 41044 | 0413 | 1043 | | SOG[1].MinimumReturnRuntimeSetting | 1 | UINT16 | 1 | For SOG1: The minimum amount of run time required before the output will be turned on, using power calculation captured at start of last shutdown. | ReadWrite | x | x | |
| 41045 | 0414 | 1044 | | SOG[2].TurnOffCountdownSetting_EN | 1 | ENUM | 1 | For SOG2: Seconds of delay to use for an off. This value will be loaded into the TurnOffCountdown_EN when a delayed off command is requested. | ReadWrite | x | x | |
| 41046 | 0415 | 1045 | | SOG[2].TurnOnCountdownSetting_EN | 1 | ENUM | 1 | For SOG2: Seconds of delay to use for an on. This value will be loaded into the TurnOnCountdown_EN when a delayed on command is requested. | ReadWrite | x | x | |
| 41047 | 0416 | 1046 | | SOG[2].StayOffCountdownSetting_4B | 2 | INT32 | 1 | For SOG2: Seconds to keep an output off before starting it again. Typically minimum value of 4, maximum of 300. | ReadWrite | x | x | |
| 41049 | 0418 | 1048 | | SOG[2].MinimumReturnRuntimeSetting | 1 | UINT16 | 1 | For SOG2: The minimum amount of run time required before the output will be turned on, using power calculation captured at start of last shutdown. | ReadWrite | x | x | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41055 | 041E | 1054 | | MOG.LoadShedConfigSetting_BF | 2 | | | Actions that cause an outlet or output to turn off. Each bit represents a separate condition. | ReadWrite | x | x | |
| | | | 0 | | | BOOLEAN | | UseOffDelay- Modifier: When set, the load shed conditions that have this as a valid modifier will use the TurnOffCountdownSetting to shut the outlet off. | | | | |
| | | | 1 | | | BOOLEAN | | ManualRestartRequired - Modifier - When set, the load shed conditions that have this as a valid modifier will use a turn off command instead of shutdown. This results in a manual intervention to restart the outlet. | | | | |
| | | | 2 | | | BOOLEAN | | Reserved | | | | |
| | | | 3 | | | BOOLEAN | | TimeOnBattery: The outlet group will shed based on the LoadShedTimeOnBatterySetting usage. When operating on battery greater than this time, the outlet will turn off. The modifier bits UseOffDelay and ManualRestartRequired are valid with this bit. | | | | |
| | | | 4 | | | BOOLEAN | | RunTimeRemaining: The outlet group will shed based on the LoadShedRuntimeRemainingSetting usage. When operating on battery and the runtime remaining is less than or equal to this value, the outlet will turn off. The modifier bits UseOffDelay and ManualRestartRequired are valid with this bit. | | | | |
| | | | 5 | | | BOOLEAN | | UPSOverload - When set, the outlet will turn off immediately (no off delay possible) when the UPS is in overload. The outlet will require a manual command to restart. Not applicable for the Main Outlet Group (MOG). | | | | |
| | | | 6-15 | | | BOOLEAN | | Reserved | | | | |
| 41057 | 0420 | 1056 | | SOG[0].LoadShedConfigSetting_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41059 | 0422 | 1058 | | SOG[1].LoadShedConfigSetting_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41061 | 0424 | 1060 | | SOG[2].LoadShedConfigSetting_BF | 2 | BOOLEAN | | SEE BIT DESCRIPTIONS ABOVE FOR MOG.LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41065 | 0428 | 1064 | | SOG[0].LoadShedRunTimeRemainingSetting | 1 | UINT16 | 1 | For Switched Outlet Group SOG0: When the Runtime remaining is less than or equal to this value, the outlet will turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41066 | 0429 | 1065 | | SOG[1].LoadShedRunTimeRemainingSetting | 1 | UINT16 | 1 | For SOG1: When the Runtime remaining is less than or equal to this value, the outlet will turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41067 | 042A | 1066 | | SOG[2].LoadShedRunTimeRemainingSetting | 1 | UINT16 | 1 | For SOG2: When the Runtime remaining is less than or equal to this value, the outlet will turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41069 | 042C | 1068 | | SOG[0].LoadShedTimeOnBatterySetting | 1 | UINT16 | 1 | For SOG0: The time on battery that will cause the outlet to turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41070 | 042D | 1069 | | SOG[1].LoadShedTimeOnBatterySetting | 1 | UINT16 | 1 | For SOG1: The time on battery that will cause the outlet to turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41071 | 042E | 1070 | | SOG[2].LoadShedTimeOnBatterySetting | 1 | UINT16 | 1 | For SOG2: The time on battery that will cause the outlet to turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41073 | 0430 | 1072 | | MOG.LoadShedRunTimeRemainingSetting | 1 | UINT16 | 1 | For Main Outlet Group (MOG): When the Runtime remaining is less than or equal to this value, the outlet will turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF. | ReadWrite | x | x | |
| 41074 | 0431 | 1073 | | MOG.LoadShedTimeOnBatterySetting | 1 | UINT16 | 1 | For MOG: The time on battery that will cause the outlet to turn off. This condition is enabled and configured with the LoadShedConfigSetting_BF | ReadWrite | x | x | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41537 | 0600 | 1536 | | UPSCommand_BF | 2 | | | Command the UPS to perform the designated function as defined by the individual bits. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | Reserved | | | | |
| | | | 1 | | | BOOLEAN | | Reserved | | | | |
| | | | 2 | | | BOOLEAN | | Reserved | | | | |
| | | | 3 | | | BOOLEAN | | RestoreFactorySettings: Restore factory default settings for all operational parameters that can be safely returned to factory defaults. Output Voltage Setting and Output Frequency Setting are not altered. Strings, User Language settings, logs, and statistical information are not reset with this command. | | | | |
| | | | 4 | | | BOOLEAN | | OutputIntoBypass: Commands the UPS into bypass if conditions allow and bypass is supported. | | | | |
| | | | 5 | | | BOOLEAN | | OutputOutOfBypass: Commands the UPS out of bypass if conditions allow and UPS is currently in bypass. | | | | |
| | | | 6 | | | BOOLEAN | | Reserved | | | | |
| | | | 7 | | | BOOLEAN | | Reserved | | | | |
| | | | 8 | | | BOOLEAN | | Reserved | | | | |
| | | | 9 | | | BOOLEAN | | ClearFaults: Clears any faults that would inhibit a restart. Note: Faults may immediately reoccur if they still exist. | | | | |
| | | | 10 | | | BOOLEAN | | Reserved | | | | |
| | | | 11 | | | BOOLEAN | | Reserved | | | | |
| | | | 12 | | | BOOLEAN | | Reserved | | | | |
| | | | 13 | | | BOOLEAN | | ResetStrings: Resets all user settable strings to their factory default values. | | | | |
| | | | 14-31 | | | BOOLEAN | | Reserved | | | | |
| 41539 | 0602 | 1538 | | OutletCommand_BF | 2 | | | A command register for performing sequenced timing (or immediate) operations to the switched or unswitched outlets. Note: If source bits are implemented it is required that one action, and one source be selected to make a valid command. | ReadWrite | x | x | |
| | | | 0 | | | BOOLEAN | | Cancel: Cancels pending actions to the targets selected. No modifiers are allowed. | | | | |
| | | | 1 | | | BOOLEAN | | OutputOn: Command the output to turn on. The only valid modifiers (in any combination) are UseOnDelay and ColdBootAllowed. | | | | |
| | | | 2 | | | BOOLEAN | | OutputOff: Command the output to turn off (and not come back on automatically). The only valid modifier is UseOffDelay. | | | | |
| | | | 3 | | | BOOLEAN | | OutputShutdown: Command the output to turn off and then back on automatically when AC input power is restored. The only valid modifiers (in any combination) are UseOffDelay and UseOnDelay. MinimumReturnRuntimeSetting is enforced when turning on. | | | | |
| | | | 4 | | | BOOLEAN | | OutputReboot: Command the output to turn off and then back on automatically. The only valid modifiers (in any combination) are UseOffDelay, UseOnDelay and ColdBootAllowed. MinimumReturnRuntimeSetting is not enforced when turning on. A Reboot command is interpretted as a sleep command when the stayofftime countdown is greater than 300 seconds. | | | | |
| | | | 5 | | | BOOLEAN | | ColdBootAllowed-Modifier: Allow the output to turn on without AC input power conditions met. | | | | |
| | | | 6 | | | BOOLEAN | | UseOnDelay-Modifier: Use the on delay settings for the applied command. | | | | |
| | | | 7 | | | BOOLEAN | | UseOffDelay-Modifier: Use the off delay settings for the applied command. | | | | |
| | | | 8 | | | BOOLEAN | | UnswitchedOutletGroup-Target: Command applies to the unswitched outlet group Main Outlet Group (MOG). | | | | |
| | | | 9 | | | BOOLEAN | | SwitchedOutletGroup0-Target: Command applies to switched outlet group 0. | | | | |
| | | | 10 | | | BOOLEAN | | SwitchedOutletGroup1-Target: Command applies to switched outlet group 1. | | | | |
| | | | 11 | | | BOOLEAN | | SwitchedOutletGroup2-Target: Command applies to switched outlet group 2. | | | | |
| | | | 12 | | | BOOLEAN | | USBPort-Source: Command came from a device connected to the USB port. | | | | |
| | | | 13 | | | BOOLEAN | | LocalUser-Source: Command came from a local user interface. | | | | |
| | | | 14 | | | BOOLEAN | | RJ45Port-Source: Command came from a device connected to the Computer Interface port (typically RJ45), This includes software over the serial RJ45 and simple signal via RJ45. | | | | |
| | | | 15 | | | BOOLEAN | | SmartSlot1-Source: Command came from a device in SmartSlot 1. | | | | |
| | | | 16 | | | BOOLEAN | | SmartSlot2-Source: Command came from a device in SmartSlot 2. | | | | |
| | | | 17 | | | BOOLEAN | | InternalNetwork1-Source: Command came from the internal network card #1. | | | | |
| | | | 18 | | | BOOLEAN | | InternalNetwork2-Source: Command came from the internal network card #2. | | | | |
| | | | 19-31 | | | BOOLEAN | | Reserved | | | | |

| Modicon Standard Register Number | Absolute Starting Register Address, (Hexadecimal) | Absolute Starting Register Address, (Decimal) | Bit | Data Point | Length # registers | Data Type | Scale (Divide Reading By) | Description | Permission | SMX/SMT | SRT | SURTD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41541 | 0604 | 1540 | | SimpleSignalingCommand_BF | 1 | | | This usage is for writing data from the simple interface. This usage should only be used for hosting the simple signaling port. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | RequestShutdown: If there is no "shutdown" action in process, this bit indicates a command to the system to shutdown. The UPS will accept this command regardless of the UPS State (Online or On Battery). It is the responsibility of the monitoring software to only issue this command at the appropriate time. | | | | |
| | | | 1 | | | BOOLEAN | | RemoteOff: This is the equivalent of pressing and holding the power off button. This will execute an immediate off function of all outlets that are on and the UPS output. | | | | |
| | | | 2 | | | BOOLEAN | | RemoteOn: This is the equivalent of pressing the power on button. This will execute a sequenced on. | | | | |
| | | | 3-15 | | | BOOLEAN | | Reserved | | | | |
| 41542 | 0605 | 1541 | | ReplaceBatteryTestCommand_BF | 1 | | | Begin a battery test to determine if the replace battery signal should be asserted / deasserted. It also proves that the battery can support the load for at least a short time. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | Start: Start the test. | | | | |
| | | | 1 | | | BOOLEAN | | Abort: Cancel the test. | | | | |
| | | | 2-15 | | | BOOLEAN | | Reserved | | | | |
| 41543 | 0606 | 1542 | | RunTimeCalibrationCommand_BF | 1 | | | Begin / cancel a run time calibration. Run time calibration may improve the accuracy of the reported run time. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | Start: Start the run time calibration. | | | | |
| | | | 1 | | | BOOLEAN | | Abort: Cancel the run time calibration. | | | | |
| | | | 2-15 | | | BOOLEAN | | Reserved | | | | |
| 41544 | 0607 | 1543 | | UserInterfaceCommand_BF | 1 | | | Commands associated with the local UI lights and beeper. | ReadWrite | x | x | x |
| | | | 0 | | | BOOLEAN | | ShortTest: Perform the momentary local UI test, e.g. light all the LEDs and sound the beeper. | | | | |
| | | | 1 | | | BOOLEAN | | ContinuousTest: Perform the continuous local UI test, e.g., light all the LEDs and sound the beeper until canceled. To cancel, set UICommand_BF.ShortTest. Local muting should cancel this as well. | | | | |
| | | | 2 | | | BOOLEAN | | MuteAllActiveAudibleAlarms: Mute all the active alarms in the UPS. Will not silence the beeper during the short or continuous test or under other implementation specific reasons (for example, key click). | | | | |
| | | | 3 | | | BOOLEAN | | CancelMute: Cancels any muting (same as audible disabled then enabled). | | | | |
| | | | 4 | | | BOOLEAN | | Reserved | | | | |
| | | | 5 | | | BOOLEAN | | AcknowledgeBatteryAlarms: Acknowledge active battery alarms. | | | | |
| | | | 6 | | | BOOLEAN | | AcknowledgeSiteWiringAlarm: Acknowledge active site wiring alarm. | | | | |
| | | | 7-15 | | | BOOLEAN | | Reserved | | | | |
| | | | | | | | | | | | | |
| 42049 | 0800 | 2048 | | ModbusMapID | 2 | ASCII | | Reports the Modbus map ID as a string, no null terminator. | ReadOnly | x | x | x |
| 42051 | 0802 | 2050 | | TestString | 4 | ASCII | | Always reports "12345678" - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42055 | 0806 | 2054 | | Test4BNumber1 | 2 | UINT32 | 1 | Always reports 0x12345678 - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42057 | 0808 | 2056 | | Test4BNumber2 | 2 | INT32 | 1 | Always reports -5 (0xFFFFFFFB) - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42059 | 080A | 2058 | | Test2BNumber1 | 1 | UINT16 | 1 | Always reports 0x1234 - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42060 | 080B | 2059 | | Test2BNumber2 | 1 | INT16 | 1 | Always reports -5 (0xFFFB) - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42061 | 080C | 2060 | | TestBPINumber1 | 1 | INT16 | 64 | Always reports 128.5 (0x2020) - included to debug end customer protocol byte order. | ReadOnly | x | x | x |
| 42062 | 080D | 2061 | | TestBPINumber2 | 1 | INT16 | 64 | Always reports -128.5 (0xDFE0) - included to debug end customer protocol byte order. | ReadOnly | x | x | x |

END OF MAP

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