specifications

GATT Characteristics

Characteristics are defined attribute types that contain a single logical value. All Assigned Numbers values on this page are normative.

Name	Uniform Type Identifier	Assigned Number
Aerobic Heart Rate Lower Limit	org.bluetooth.characteristic.aerobic_heart_rate_lower_limit	0×2A7E
Aerobic Heart Rate Upper Limit	org.bluetooth.characteristic.aerobic_heart_rate_upper_limit	0×2A84
Aerobic Threshold	org.bluetooth.characteristic.aerobic_threshold	0×2A7F
Age	org.bluetooth.characteristic.age	0×2A80
Aggregate	org.bluetooth.characteristic.aggregate	0×2A5A
Alert Category ID	org.bluetooth.characteristic.alert_category_id	0×2A43
Alert Category ID Bit Mask	org.bluetooth.characteristic.alert_category_id_bit_mask	0×2A42
Alert Level	org.bluetooth.characteristic.alert_level	0×2A06
Alert Notification Control Point	org.bluetooth.characteristic.alert_notification_control_point	0×2A44

Alert Status	org.bluetooth.characteristic.alert_status	0×2A3F
Altitude	org.bluetooth.characteristic.altitude	0×2AB3
Anaerobic Heart Rate Lower Limit	org.bluetooth.characteristic.anaerobic_heart_rate_lower_limit	0×2A81
Anaerobic Heart Rate Upper Limit	org.bluetooth.characteristic.anaerobic_heart_rate_upper_limit	0×2A82
Anaerobic Threshold	org.bluetooth.characteristic.anaerobic_threshold	0×2A83
Analog	org.bluetooth.characteristic.analog	0×2A58
Analog Output	org.bluetooth.characteristic.analog_output	0×2A59
Apparent Wind Direction	org.bluetooth.characteristic.apparent_wind_direction	0×2A73
Apparent Wind Speed	org.bluetooth.characteristic.apparent_wind_speed	0×2A72
Appearance	org.bluetooth.characteristic.gap.appearance	0×2A01
Barometric Pressure Trend	org.bluetooth.characteristic.barometric_pressure_trend	0×2AA3
Battery Level	org.bluetooth.characteristic.battery_level	0×2A19
Battery Level State	org.bluetooth.characteristic.battery_level_state	0×2A1B
Battery Power State	org.bluetooth.characteristic.battery_power_state	0×2A1A
Blood Pressure Feature	org.bluetooth.characteristic.blood_pressure_feature	0×2A49
Blood Pressure	org.bluetooth.characteristic.blood_pressure_measurement	0×2A35

Measurement

Body Composition Feature	org.bluetooth.characteristic.body_composition_feature	0×2A9B
Body Composition Measurement	org.bluetooth.characteristic.body_composition_measurement	0×2A9C
Body Sensor Location	org.bluetooth.characteristic.body_sensor_location	0×2A38
Bond Management Control Point	org.bluetooth.characteristic.bond_management_control_point	0×2AA4
Bond Management Features	org.bluetooth.characteristic.bond_management_feature	0×2AA5
Boot Keyboard Input Report	org.bluetooth.characteristic.boot_keyboard_input_report	0×2A22
Boot Keyboard Output Report	org.bluetooth.characteristic.boot_keyboard_output_report	0×2A32
Boot Mouse Input Report	org.bluetooth.characteristic.boot_mouse_input_report	0×2A33
Central Address Resolution	org.bluetooth.characteristic.gap.central_address_resolution	0×2AA6
CGM Feature	org.bluetooth.characteristic.cgm_feature	0×2AA8
CGM Measurement	org.bluetooth.characteristic.cgm_measurement	0×2AA7
CGM Session Run Time	org.bluetooth.characteristic.cgm_session_run_time	0×2AAB
CGM Session	org.bluetooth.characteristic.cgm_session_start_time	0×2AAA

Start Time

CGM Specific Ops Control Point	org.bluetooth.characteristic.cgm_specific_ops_control_point	0×2AAC
CGM Status	org.bluetooth.characteristic.cgm_status	0×2AA9
Cross Trainer Data	org.bluetooth.characteristic.cross_trainer_data	0×2ACE
CSC Feature	org.bluetooth.characteristic.csc_feature	0×2A5C
CSC Measurement	org.bluetooth.characteristic.csc_measurement	0×2A5B
Current Time	org.bluetooth.characteristic.current_time	0×2A2B
Cycling Power Control Point	org.bluetooth.characteristic.cycling_power_control_point	0×2A66
Cycling Power Control Point	org.bluetooth.characteristic.cycling_power_control_point	0×2A66
Cycling Power Feature	org.bluetooth.characteristic.cycling_power_feature	0×2A65
Cycling Power Feature	org.bluetooth.characteristic.cycling_power_feature	0×2A65
Cycling Power Measurement	org.bluetooth.characteristic.cycling_power_measurement	0×2A63
Cycling Power Vector	org.bluetooth.characteristic.cycling_power_vector	0×2A64
Database Change Increment	org.bluetooth.characteristic.database_change_increment	0×2A99
Date of Birth	org.bluetooth.characteristic.date_of_birth	0×2A85
Date of	org.bluetooth.characteristic.date_of_threshold_assessment	0×2A86

Threshold Assessment		
Date Time	org.bluetooth.characteristic.date_time	0×2A08
Day Date Time	org.bluetooth.characteristic.day_date_time	0×2A0A
Day of Week	org.bluetooth.characteristic.day_of_week	0×2A09
Descriptor Value Changed	org.bluetooth.characteristic.descriptor_value_changed	0×2A7D
Device Name	org.bluetooth.characteristic.gap.device_name	0×2A00
Dew Point	org.bluetooth.characteristic.dew_point	0×2A7B
Digital	org.bluetooth.characteristic.digital	0×2A56
Digital Output	org.bluetooth.characteristic.digital_output	0×2A57
DST Offset	org.bluetooth.characteristic.dst_offset	0×2A0D
Elevation	org.bluetooth.characteristic.elevation	0×2A6C
Email Address	org.bluetooth.characteristic.email_address	0×2A87
Exact Time 100	org.bluetooth.characteristic.exact_time_100	0×2A0B
Exact Time 256	org.bluetooth.characteristic.exact_time_256	0×2A0C
Fat Burn Heart Rate Lower Limit	org.bluetooth.characteristic.fat_burn_heart_rate_lower_limit	0×2A88
Fat Burn Heart Rate Upper Limit	org.bluetooth.characteristic.fat_burn_heart_rate_upper_limit	0×2A89
Firmware Revision String	org.bluetooth.characteristic.firmware_revision_string	0×2A26

First Name	org.bluetooth.characteristic.first_name	0×2A8A
Fitness Machine Control Point	org.bluetooth.characteristic.fitness_machine_control_point	0×2AD9
Fitness Machine Feature	org.bluetooth.characteristic.fitness_machine_feature	0×2ACC
Fitness Machine Status	org.bluetooth.characteristic.fitness_machine_status	0×2ADA
Five Zone Heart Rate Limits	org.bluetooth.characteristic.five_zone_heart_rate_limits	0×2A8B
Floor Number	org.bluetooth.characteristic.floor_number	0×2AB2
Gender	org.bluetooth.characteristic.gender	0×2A8C
Glucose Feature	org.bluetooth.characteristic.glucose_feature	0×2A51
Glucose Measurement	org.bluetooth.characteristic.glucose_measurement	0×2A18
Glucose Measurement Context	org.bluetooth.characteristic.glucose_measurement_context	0×2A34
Gust Factor	org.bluetooth.characteristic.gust_factor	0×2A74
Hardware Revision String	org.bluetooth.characteristic.hardware_revision_string	0×2A27
Heart Rate Control Point	org.bluetooth.characteristic.heart_rate_control_point	0×2A39
Heart Rate Max	org.bluetooth.characteristic.heart_rate_max	0×2A8D

Heart Rate Measurement	org.bluetooth.characteristic.heart_rate_measurement	0×2A37
Heat Index	org.bluetooth.characteristic.heat_index	0×2A7A
Height	org.bluetooth.characteristic.height	0×2A8E
HID Control Point	org.bluetooth.characteristic.hid_control_point	0×2A4C
HID Information	org.bluetooth.characteristic.hid_information	0×2A4A
Hip Circumference	org.bluetooth.characteristic.hip_circumference	0×2A8F
HTTP Control Point	org.bluetooth.characteristic.http_control_point	0×2ABA
HTTP Entity Body	org.bluetooth.characteristic.http_entity_body	0×2AB9
HTTP Headers	org.bluetooth.characteristic.http_headers	0×2AB7
HTTP Status Code	org.bluetooth.characteristic.http_status_code	0×2AB8
HTTPS Security	org.bluetooth.characteristic.https_security	0×2ABB
Humidity	org.bluetooth.characteristic.humidity	0×2A6F
IEEE 11073-20601 Regulatory Certification Data List	org.bluetooth.characteristic.ieee_11073-20601_regulatory_certification_data_list	0×2A2A
Indoor Bike Data	org.bluetooth.characteristic.indoor_bike_data	0×2AD2
Indoor Positioning	org.bluetooth.characteristic.indoor_positioning_configuration	0×2AAD

Configuration

Intermediate Cuff Pressure	org.bluetooth.characteristic.intermediate_cuff_pressure	0×2A36
Intermediate Temperature	org.bluetooth.characteristic.intermediate_temperature	0×2A1E
Irradiance	org.bluetooth.characteristic.irradiance	0×2A77
Language	org.bluetooth.characteristic.language	0×2AA2
Last Name	org.bluetooth.characteristic.last_name	0×2A90
Latitude	org.bluetooth.characteristic.latitude	0×2AAE
LN Control Point	org.bluetooth.characteristic.ln_control_point	0×2A6B
LN Feature	org.bluetooth.characteristic.ln_feature	0×2A6A
Local East Coordinate	org.bluetooth.characteristic.local_east_coordinate	0×2AB1
Local North Coordinate	org.bluetooth.characteristic.local_north_coordinate	0×2AB0
Local Time Information	org.bluetooth.characteristic.local_time_information	0×2A0F
Location and Speed Characteristic	org.bluetooth.characteristic.location_and_speed	0×2A67
Location Name	org.bluetooth.characteristic.location_name	0×2AB5
Longitude	org.bluetooth.characteristic.Longitude	0×2AAF
Magnetic Declination	org.bluetooth.characteristic.magnetic_declination	0×2A2C
Magnetic Flux	org.bluetooth.characteristic.Magnetic_flux_density_2D	0×2AA0

Density - 2D

Magnetic Flux Density - 3D	org.bluetooth.characteristic.Magnetic_flux_density_3D	0×2AA1
Manufacturer Name String	org.bluetooth.characteristic.manufacturer_name_string	0×2A29
Maximum Recommended Heart Rate	org.bluetooth.characteristic.maximum_recommended_heart_rate	0×2A91
Measurement Interval	org.bluetooth.characteristic.measurement_interval	0×2A21
Model Number String	org.bluetooth.characteristic.model_number_string	0×2A24
Navigation	org.bluetooth.characteristic.navigation	0×2A68
Network Availability	org.bluetooth.characteristic.network_availability	0×2A3E
New Alert	org.bluetooth.characteristic.new_alert	0×2A46
Object Action Control Point	org.bluetooth.characteristic.object_action_control_point	0×2AC5
Object Changed	org.bluetooth.characteristic.object_changed	0×2AC8
Object First-Created	org.bluetooth.characteristic.object_first_created	0×2AC1
Object ID	org.bluetooth.characteristic.object_id	0×2AC3
Object Last-Modified	org.bluetooth.characteristic.object_last_modified	0×2AC2
Object List Control Point	org.bluetooth.characteristic.object_list_control_point	0×2AC6
Object List	org.bluetooth.characteristic.object_list_filter	0×2AC7

Filter

Object Name	org.bluetooth.characteristic.object_name	0×2ABE
Object Properties	org.bluetooth.characteristic.object_properties	0×2AC4
Object Size	org.bluetooth.characteristic.object_size	0×2AC0
Object Type	org.bluetooth.characteristic.object_type	0×2ABF
OTS Feature	org.bluetooth.characteristic.ots_feature	0×2ABD
Peripheral Preferred Connection Parameters	org.bluetooth.characteristic.gap.peripheral_preferred_connection_parameters	0×2A04
Peripheral Privacy Flag	org.bluetooth.characteristic.gap.peripheral_privacy_flag	0×2A02
PLX Continuous Measurement Characteristic	org.bluetooth.characteristic.plx_continuous_measurement	0×2A5F
PLX Features	org.bluetooth.characteristic.plx_features	0×2A60
PLX Spot-Check Measurement	org.bluetooth.characteristic.plx_spot_check_measurement	0×2A5E
PnP ID	org.bluetooth.characteristic.pnp_id	0×2A50
Pollen Concentration	org.bluetooth.characteristic.pollen_concentration	0×2A75
Position 2D	org.bluetooth.characteristic.position_2d	0×2A2F
Position 3D	org.bluetooth.characteristic.position_3d	0×2A30
Position Quality	org.bluetooth.characteristic.position_quality	0×2A69

Pressure	org.bluetooth.characteristic.pressure	0×2A6D
Protocol Mode	org.bluetooth.characteristic.protocol_mode	0×2A4E
Pulse Oximetry Control Point	org.bluetooth.characteristic.pulse_oximetry_control_point	0×2A62
Pulse Oximetry Pulsatile Event Characteristic	org.bluetooth.characteristic.pulse_oximetry_pulsatile_event	0×2A60
Rainfall	org.bluetooth.characteristic.rainfall	0×2A78
Reconnection Address	org.bluetooth.characteristic.gap.reconnection_address	0×2A03
Record Access Control Point	org.bluetooth.characteristic.record_access_control_point	0×2A52
Reference Time Information	org.bluetooth.characteristic.reference_time_information	0×2A14
Removable	org.bluetooth.characteristic.removable	0×2A3A
Report	org.bluetooth.characteristic.report	0×2A4D
Report Map	org.bluetooth.characteristic.report_map	0×2A4B
Resolvable Private Address Only	org.bluetooth.characteristic.resolvable_private_address_only	0×2AC9
Resting Heart Rate	org.bluetooth.characteristic.resting_heart_rate	0×2A92
Ringer Control point	org.bluetooth.characteristic.ringer_control_point	0×2A40
Ringer Setting	org.bluetooth.characteristic.ringer_setting	0×2A41

Rower Data	org.bluetooth.characteristic.rower_data	0×2AD1
RSC Feature	org.bluetooth.characteristic.rsc_feature	0×2A54
RSC Measurement	org.bluetooth.characteristic.rsc_measurement	0×2A53
SC Control Point	org.bluetooth.characteristic.sc_control_point	0×2A55
Scan Interval Window	org.bluetooth.characteristic.scan_interval_window	0×2A4F
Scan Refresh	org.bluetooth.characteristic.scan_refresh	0×2A31
Scientific Temperature Celsius	org.bluetooth.characteristic.scientific_temperature_celsius	0×2A3C
Secondary Time Zone	org.bluetooth.characteristic.secondary_time_zone	0×2A10
Sensor Location	org.bluetooth.characteristic.sensor_location	0×2A5D
Serial Number String	org.bluetooth.characteristic.serial_number_string	0×2A25
Service Changed	org.bluetooth.characteristic.gatt.service_changed	0×2A05
Service Required	org.bluetooth.characteristic.service_required	0×2A3B
Software Revision String	org.bluetooth.characteristic.software_revision_string	0×2A28
Sport Type for Aerobic and Anaerobic Thresholds	org.bluetooth.characteristic.sport_type_for_aerobic_and_anaerobic_thresholds	0×2A93
Stair Climber	org.bluetooth.characteristic.stair_climber_data	0×2AD0

Data

Step Climber Data	org.bluetooth.characteristic.step_climber_data	0×2ACF
String	org.bluetooth.characteristic.string	0×2A3D
Supported Heart Rate Range	org.bluetooth.characteristic.supported_heart_rate_range	0×2AD7
Supported Inclination Range	org.bluetooth.characteristic.supported_inclination_range	0×2AD5
Supported New Alert Category	org.bluetooth.characteristic.supported_new_alert_category	0×2A47
Supported Power Range	org.bluetooth.characteristic.supported_power_range	0×2AD8
Supported Resistance Level Range	org.bluetooth.characteristic.supported_resistance_level_range	0×2AD6
Supported Speed Range	org.bluetooth.characteristic.supported_speed_range	0×2AD4
Supported Unread Alert Category	org.bluetooth.characteristic.supported_unread_alert_category	0×2A48
System ID	org.bluetooth.characteristic.system_id	0×2A23
TDS Control Point	org.bluetooth.characteristic.tds_control_point	0×2ABC
Temperature	org.bluetooth.characteristic.temperature	0×2A6E
Temperature Celsius	org.bluetooth.characteristic.temperature_celsius	0×2A1F

Temperature Fahrenheit	org.bluetooth.characteristic.temperature_fahrenheit	0×2A20
Temperature Measurement	org.bluetooth.characteristic.temperature_measurement	0×2A1C
Temperature Type	org.bluetooth.characteristic.temperature_type	0×2A1D
Three Zone Heart Rate Limits	org.bluetooth.characteristic.three_zone_heart_rate_limits	0×2A94
Time Accuracy	org.bluetooth.characteristic.time_accuracy	0×2A12
Time Broadcast	org.bluetooth.characteristic.time_broadcast	0×2A15
Time Source	org.bluetooth.characteristic.time_source	0×2A13
Time Update Control Point	org.bluetooth.characteristic.time_update_control_point	0×2A16
Time Update State	org.bluetooth.characteristic.time_update_state	0×2A17
Time with DST	org.bluetooth.characteristic.time_with_dst	0×2A11
Time Zone	org.bluetooth.characteristic.time_zone	0×2A0E
Training Status	org.bluetooth.characteristic.training_status	0×2AD3
Treadmill Data	org.bluetooth.characteristic.treadmill_data	0×2ACD
True Wind Direction	org.bluetooth.characteristic.true_wind_direction	0×2A71
True Wind Speed	org.bluetooth.characteristic.true_wind_speed	0×2A70
Two Zone Heart Rate Limit	org.bluetooth.characteristic.two_zone_heart_rate_limit	0×2A95

Tx Power Level	org.bluetooth.characteristic.tx_power_level	0×2A07
Uncertainty	org.bluetooth.characteristic.uncertainty	0×2AB4
Unread Alert Status	org.bluetooth.characteristic.unread_alert_status	0×2A45
URI	org.bluetooth.characteristic.uri	0×2AB6
User Control Point	org.bluetooth.characteristic.user_control_point	0×2A9F
User Index	org.bluetooth.characteristic.user_index	0×2A9A
UV Index	org.bluetooth.characteristic.uv_index	0×2A76
VO2 Max	org.bluetooth.characteristic.vo2_max	0×2A96
Waist Circumference	org.bluetooth.characteristic.waist_circumference	0×2A97
Weight	org.bluetooth.characteristic.weight	0×2A98
Weight Measurement	org.bluetooth.characteristic.weight_measurement	0×2A9D
Weight Scale Feature	org.bluetooth.characteristic.weight_scale_feature	0×2A9E
Wind Chill	org.bluetooth.characteristic.wind_chill	0×2A79