



Yardarm HolsterAware GATT Profile

Generic Open Profile

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Introduction

This document describes the BLE GATT services provided by the Yardarm HolsterAware sensor when configured for the generic open profile. The generic open profile provides access to the primary functionality of the sensor in a way that maximally conforms to existing standard profiles and services.

This profile is subject to change in future releases.

Advertisements

Prior to connection, HolsterAware transmits the following information in advertisement and scan response packets. This information can be used to identify individual units and filter searches for valid HolsterAware devices:

Advertisement Packet Format

Advertising Flags	GeneralDiscoverable; BrEdrNotSupported
ServicesIncompleteListUuid128	<Yardarm Holster Service UUID>

Scan Response Packet Format

CompleteLocalName	YA xxxxxx (where xxxxxx is the sensor's 6-character serial number)
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HolsterAware sensors use random static device addresses.

GATT Services

Device Information Service

HolsterAware offers the Bluetooth-standard Device Information Service for obtaining details about the sensor. The following fields are implemented:

Manufacturer Name	"Yardarm Technologies, Inc."
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Model Number	"S-XHA-AA"
Hardware Revision	"13" (subject to change)
Firmware Revision	"0.0.16.11" (subject to change)
Serial Number	"XXXXNN" (where 'X' is a letter and 'N' is a digit)

Battery Service

HolsterAware offers the Bluetooth-standard Battery Service for determining the charge state of the internal battery. This service does not support the optional notification feature. It is read-only.

Battery Level	0-100 percent of battery life remaining
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Yardarm Holster Service

Information about holster detection is provided by the Holster Service. It includes the following characteristics:

HolsterState Characteristic

Characteristic Behavior

The HolsterState characteristic can be read to determine whether the holster sensor is currently in a holstered or unholstered state. It also supports notifications to inform a listening client when the holster state changes. The possible values for the HolsterState characteristic are in the table below:

Value	Meaning
0	Holster state unknown
1	Holstered
2	Unholstered

HolsterCurrentValue Characteristic

The current value characteristic provides live access to low-level sensor readings. This information can be used during installation and calibration. The contents of the current value characteristic are proprietary and not intended for customer use.



However, this characteristic value may be requested by Yardarm during customer support sessions. The characteristic supports both read and notify.

Note, enabling notifications on this characteristic greatly increases radio traffic and power consumption. Notifications should not be enabled during normal use.

Identifiers

Bluetooth SIG services and characteristics utilize the identifiers published by the SIG.

Yardarm-defined services and characteristics lie within the Yardarm base UUID space. The Yardarm base UUID is:

24FBxxxx-C178-6FD4-17B6-BE8FFCA8C3C0

Each Yardarm service and characteristic has a unique 16-bit ID. To create a complete UUID, replace the 'xxx' in the above base UUID with the 16-bit value in the table below.

Service / Characteristic	16-bit UUID
Yardarm Holster Service	18FD
HolsterState Characteristic	2ADF
HolsterCurrentValue Characteristic	2ADD

In addition to those listed above, the HolsterAware may include several additional services and characteristics that are not currently supported for customer use. The current list of those UUIDs is provided below to prevent confusion:

Closed Services: 18FC, 18FE

Closed Characteristics: 2ACD, 2ACE, 2ACF, 2AE0, 2AE1

Note that attempting to access unsupported characteristics may adversely affect the function of HolsterAware.

Contact

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