

SRDP Frame Format

Bits Field	16	2	3	11	16	16	16	16	<64k octets
	SEQ	FT	OP	DEV	REG	POS	LEN	CRC16	DATA
	*: all fields little endian								
Synchronize	Frame Sequence Number	1	1	0	0	<Magic Value>	<Magic Value>	Frame CRC-16	-
Read Register	Frame Sequence Number	1	2	Device Index	Register Index	Read Position	Read Length	Frame CRC-16	-
Read Acknowledge	Frame Sequence Number	2	2	Device Index	Register Index	Read Position (actual)	Read Length (actual)	Frame CRC-16	Read Data
Read Error	Frame Sequence Number	3	2	Device Index	Register Index	0	Error Length	Frame CRC-16	Error Data
Write Register	Frame Sequence Number	1	3	Device Index	Register Index	Write Position	Write Length	Frame CRC-16	Write Data
Write Acknowledge	Frame Sequence Number	2	3	Device Index	Register Index	Write Position (actual)	Write Length (actual)	Frame CRC-16	-
Write Error	Frame Sequence Number	3	3	Device Index	Register Index	0	Error Length	Frame CRC-16	Error Data
Watch Register	Frame Sequence Number	1	4	Device Index	Register Index	0	0	Frame CRC-16	-
Watch Acknowledge	Frame Sequence Number	2	4	Device Index	Register Index	0	0	Frame CRC-16	-
Watch Error	Frame Sequence Number	3	4	Device Index	Register Index	0	Error Length	Frame CRC-16	Error Data
Unwatch Register	Frame Sequence Number	1	5	Device Index	Register Index	0	0	Frame CRC-16	-
Unwatch Acknowledge	Frame Sequence Number	2	5	Device Index	Register Index	0	0	Frame CRC-16	-
Unwatch Error	Frame Sequence Number	3	5	Device Index	Register Index	0	Error Length	Frame CRC-16	Error Data
Register Change	Frame Sequence Number	1	6	Device Index	Register Index	Change Position (actual)	Change Length (actual)	Frame CRC-16	Change Data
Change Acknowledge	Frame Sequence Number	2	6	Device Index	Register Index	0	0	Frame CRC-16	-
Change Error	Frame Sequence Number	3	6	Device Index	Register Index	0	Error Length	Frame CRC-16	Error Data

Register Map Example: Adapter with GPS Sensor

Path mapped by WebMQ	Device Index	Register Index	Operations	Type Signature	Components	Description	Comments
/id	0	1	READ	QQ		The globally unique 128-Bit UUID of the adapter.	
/eds	0	2	READ	s		The URI of the electronic datasheet (EDS) of the adapter.	
/devices	0	3	READ, WATCH	H*		A vector of the device indices of the devices currently connected to the adapter.	Whenever the adapter recognizes a new device or a device is leaving (or lost), this register changes it's value.
/device/1/id	1	1	READ	QQ		The globally unique 128-Bit UUID of the device.	
/device/1/eds	1	2	READ	s		The URI of the electronic datasheet (EDS) of the device.	
/device/1/location/position	1	1024	READ, WATCH	Iffc	timestamp, longitude, latitude, mode	The current GPS position and auxiliary information.	
/device/1/location/position/maxUpdateRate	1	1025	READ, WRITE	I		Maximum update frequency of position.	